UNITED STATES OF AMERICA

v.

KHALID SHEIKH MOHAMMED, WALID MUHAMMAD SALIH MUBARAK BIN 'ATTASH, RAMZI BIN AL SHIBH, ALI ABDUL AZIZ ALI, MUSTAFA AHMED ADAM AL HAWSAWI

Defense Motion For Appropriate Relief:

Seeking the Appointment of Defense Expert Consultant Dr. Ruben C. Gur, M.A., Ph.D.,

25 June 2009

- **1.** <u>Timeliness</u>: This Motion is timely filed pursuant to the Commissions Ruling P-010, dated 11 June 2009.
- **Relief Sought:** Detailed defense counsel for Mr. Ramzi bin al Shibh respectfully request the Commission to order the appointment and funding for Dr. Ruben C. Gur, M.A., Ph.D., to serve as a defense expert consultant in the field of neuroimaging in psychiatry. ¹
- **3.** Overview: Among the medical evidence the government provided the defense, there are

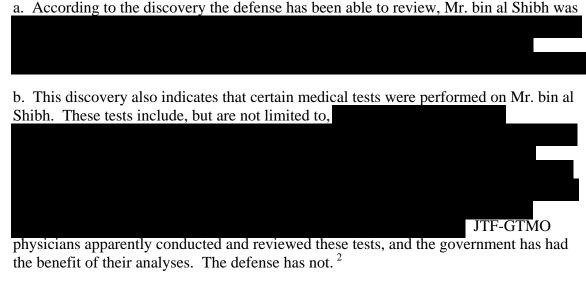
. To assist in its preparation for the R.M.C. 909 competency hearing in this capital case, the defense requested the convening authority approve the appointment of Dr. Gur to act as a defense expert consultant in the field of neuroimaging in psychiatry. In light of the nature of the medical and psychiatric evidence to be addressed at the hearing that are well beyond the scope of defense counsel's expertise, Dr. Gur's training and experience are necessary to assist the defense as it prepares for the R.M.C. 909 competency hearing. The failure to appoint

¹ This motion is filed pursuant to the Military Judge's ruling of 11 June 2009, ordering that a hearing take place in this case. The rules applicable to this proceeding are uncertain in light of pending changes to the Regulations for Trial by Military Commissions, and to the Military Commissions Act itself. In filing this motion, the defense reserves the right to supplement this motion with further arguments that may be available following any changes to said statute or regulations.

Dr. Gur will result in a patently unfair proceeding as counsel will be unable to analyze the medical evidence and thus, unable adequately to represent Mr. bin al Shibh.

Burden and Standard of Proof: As the moving party, the defense bears the burden of establishing that it is entitled to the requested relief. *See* R.M.C. 905(c)(2)(A). "[T]he accused has the burden of establishing that a reasonable probability exists that (1) an expert would be of assistance to the defense and (2) that denial of expert assistance would result in a fundamentally unfair trial." *United States v. Freeman*, 65 M.J. 451, 458 (C.A.A.F. 2008); *citing United States v. Gunkle*, 55 M.J. 26, 31-32 (C.A.A.F. 2001). "[T]he burden of proof on any factual issue the resolution of which is necessary to decide a motion shall be by a preponderance of the evidence." R.M.C. 905(c)(2).

5. Facts:



c. On 9 January 2009, the defense submitted a Memorandum for the Convening Authority requesting the appointment of Dr. Ruben C. Gur, M.A., Ph.D., to the defense team. [Attachment A]. In addition to detailing Dr. Gur's qualifications, necessity of appointment, and estimated funding requirements, the defense also enclosed a copy of his *curriculum vitae*. [Attachment B]. The Convening Authority denied the defense request on 13 January 2009. [Attachment C]

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² The defense notes that it has not even been provided in discovery the JTF that would ordinarily go along with the

6. <u>Law and Argument:</u>

- I. THE COMMISSION SHOULD APPLY U.S. MILITARY COURTS-MARTIAL LAW AND FIND THE DEFENSE HAS MADE AN ADEQUATE SHOWING OF NECESSITY FOR EXPERT ASSISTANCE UNDER THE COURT-MARTIAL STANDARD
- a. "Defense counsel in a military commission under this chapter shall have a reasonable opportunity to obtain witnesses and other evidence as provided in regulations prescribed by the Secretary of Defense." 10 U.S.C. § 949j(a). On 9 January 2009, the defense sought approval from the convening authority to appoint and fund Dr. Ruben C. Gur, M.A., Ph.D., to serve as a defense expert consultant in the field of neuroimaging in psychiatry. The defense sought the appointment of Dr. Gur so that it could have the opportunity to analyze medical evidence relevant to the issue of whether Mr. bin al Shibh is competent to stand trial, to make a knowing and voluntary waiver of his right to counsel, and/or to determine whether he suffers from a diminished capacity. *See* R.M.C. 506(c); R.M.C. 909(a); *Faretta v. California*, 422 U.S. 806 (1975); *Dusky v. United States*, 362 U.S. 402 (1960)(per curiam).

b. The convening authority denied the defense request on 13 January 2009. This denial was based on the convening authority's determination that the defense did not demonstrate necessity for the appointment of an expert. *See* **Attachment** C.³ "A request denied by the

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The defense respectfully requests the Commission give no weight to the determination and findings of the convening authority. This is especially important because it cannot be ignored that the convening authority is the former Chief Judge of the U.S. Court of Appeals for the Armed Forces and thus it is foreseeable that a military judge may give more weight to her findings and conclusions than typically afforded to a convening authority. Further, the defense also must note that the convening authority has in the past offered emphatic dissents and demonstrated open hostility to majority opinions requiring appointment of experts for the defense. *See United States v. Warner*, 62 M.J. 114, 123 (C.A.A.F. 2005)(Crawford, J., dissenting) ("I must respectfully, but emphatically dissent."), at 128 ("The result is a retrospective rule that will alter the landscape of every court-martial now on appeal or yet to be tried, that involves either a Government expert consultant or expert witness."), at 130 ("Setting aside for the moment the majority's reinventing of Article 46 and R.C.M. 703...), at 132 ("[t]he

convening authority may be renewed before the military judge, who shall determine whether the testimony of the expert is relevant and necessary." R.M.C. 703(d). Of note is that the rule relied upon by the convening authority, on its face, applies primarily to employment of expert *witnesses*, rather than *consultants*.

c. There is no corollary procedure applied in U.S. Federal District Courts to provide for the employment of defense expert consultants because the very notion of a "convening authority" is unique to the military justice system, both in courts-martial and commissions. To implement the M.C.A., the Commission should look towards the judicial construction and application of the procedural rules for military courts-martial, as prescribed by the Uniform Code of Military Justice (U.C.M.J.). *See* M.C.A., Part I (Preamble), ¶ 1(e); *quoting* 10 U.S.C. § 949a(a) ("Such rules 'shall, so far as the Secretary considers practicable or consistent with military or intelligence activities, apply the principles of law and the rules of evidence' for trials by general courts-martial, so long as the rules and procedures are not contrary or inconsistent with the M.C.A.); *but see* M.C.A., Part I (Preamble), ¶ 1(b)("While the M.C.A. is consistent with the U.C.M.J. in many respects, neither the U.C.M.J. itself nor '[t]he judicial construction and application of that chapter' is binding on trials by military commissions." (10 U.S.C. § 949b(c)).

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majority's gymnastic pronouncements..."), at 133 ("In *United States v. McAllister*, 55 M.J. 270, 281-82 (C.A.A.F. 2001)(Crawford, C.J., dissenting), I dissented from the Court's relegation to a mere formality of the defense burden to establish necessity for a particular expertise."), at 134 ("Our Constitution contains its own wise restraint on 'cumulative and problematic' effects – separation of powers doctrine. Will the military society respect a judicial system that ignores that doctrine as well as prevailing legal standards and decisions? And will the American public have confidence that the intent of Congress in promulgating the UCMJ is being respected? I fear not."); *United States v. Kreutzer*, 61 M.J. 293, 306 (C.A.A.F. 2005) (Crawford, J., dissenting) ("I respectfully dissent from the majority's expansion of *Ake v. Oklahoma*, 470 U.S. 68, 105 S.Ct. 1087 (1985), by finding in the U.S. Constitution a right of an accused to a death penalty mitigation specialist on the defense team, without the accused first demonstrating the need for such an expert.").

- d. In military courts-martial, "service members are entitled to investigative or other expert assistance when necessary for an adequate defense." *United States v. Freeman*, 65 M.J. 451, 458 (C.A.A.F. 2008); *quoting United States v. Garries*, 22 M.J. 288, 290 (C.M.A. 1986); *accord United States v. Bresnahan*, 62 M.J. 137, 143 (C.A.A.F. 2005). "[T]he accused has the burden of establishing that a reasonable probability exists that (1) an expert would be of assistance to the defense and (2) that denial of expert assistance would result in a fundamentally unfair trial." *Id.*; *citing United States v. Gunkle*, 55 M.J. 26, 31-32 (C.A.A.F. 2001).
 - II. DR. GUR'S EXPERT ASSISTANCE IS NECESSARY FOR DEFENSE COUNSEL'S UNDERSTANDING OF THE MEDICAL RECORDS, AND DEFENSE COUNSEL ARE UNABLE TO GAIN THE MEDICAL EXPERTISE INDEPENDENTLY
- a. To establish that an expert would be of assistance, the accused "must show (1) why the expert assistance is needed; (2) what the expert assistance would accomplish for the accused; and (3) why the defense counsel were unable to gather and present the evidence that the expert assistance would be able to develop." *Id.*; *quoting Bresnahan*, 62 M.J. at 143.

b. Why the expert assistance is needed.

- 1. Department of Defense (DoD) physician(s) determined that Mr. bin al Shibh

 . See D-017, Attachments G; see also

 Diagnostics and Statistics Manual-IV (DSM IV-TR),

 . This diagnosis came as a result of JTF medical personnel's assessments and testing of Mr. bin al Shibh.
- 2. Consequently, Mr. bin al Shibh's legal competency is at issue now. The competency question arose before this Commission, when, during the arraignment, Mr. bin al Shibh sought to waive his right to counsel and represent himself *pro se*. The Military Judge

refused to accept his waiver because Mr. bin al Shibh

fact was confirmed when, on 24 June 2008, the government turned over to the defense a

documenting that he had been on a series of psychotropic. *See* **D-017**(**Defense Motion to Compel Expert**), **Attachment B**. On 1 July 2008, the Military Judge, *sua sponte*, ordered that a 706 Board be conducted. *See* **MJ 006**.

3. Conducting a full and thorough investigation, review, and analysis of the competency and mental capacity of Mr. bin al Shibh is not a matter of trial strategy – it is the ethical obligation of defense counsel as attorneys. ⁴ Ake v. Oklahoma, 470 U.S. 68, 105 S.Ct. 1087 (1985) (holding that the Constitution requires the defendant have access to a competent psychiatrist to conduct an appropriate examination and assist in evaluation, preparation, and presentation of the defense); United States v. Sloan, 776 F.2d 926, 929 (10th Cir. 1985) (error to deny defense request for expert on grounds that there was no need for second opinion beyond that of government's expert: "when an accused makes a clear showing ... that his mental condition will be a significant factor at trial, the judge has a clear duty upon request to appoint a psychiatric expert to assist in the defense of the case; [t]he essential benefit of having an expert in the first place is denied the defendant when the services of the doctor must be shared with the prosecution"); Buttrum v. Black, 721 F.Supp. 1268, 1312 (N.D. Ga. 1989), aff'd, 908 F.2d 695 (11th Cir. 1990), reh. denied, 916 F.2d 719 (11th Cir. 1990) (trial court "failed to provide the scope of psychiatric assistance contemplated by Ake;" Buttrum was not provided with a psychiatrist to work closely with the defense, conduct an independent examination, testify if necessary, prepare for the sentencing phase, and respond to state testimony regarding future dangerousness)

⁴ Detailed defense counsel are licensed to practice law in California and Virginia (CDR Lachelier) and Indiana (LT Federico).

- 4. Dr. Gur's assistance is necessary so that defense counsel may fulfill their ethical obligations. The defense is ethically required to determine whether Mr. bin al Shibh suffers from any diminished capacity to make adequately considered decisions in connection with representation. See MODEL RULES OF PROFESSIONAL CONDUCT, Rule 1.2, Comment 4 ("In a case in which the client appears to be suffering diminished capacity, the lawyer's duty to abide by the client's decisions is to be guided by reference to Rule 1.14."); Rule 1.14(a) ("When a client's capacity to make adequately considered decisions in connection with a representation is diminished, whether because of minority, mental impairment or for some other reason, the lawyer shall, as far as reasonably possible, maintain a normal client-lawyer relationship with the client."). Dr. Gur's assistance is necessary to help the defense analyze and understand medical evidence that defense counsel have no background in reading, and his expertise is directly relevant to the tests sought to be analyzed, and to Mr. bin al Shibh's competency. The requested expert assistance is also critical because, presumably, the JTF medical personnel did not order the tests unnecessarily, and the government has had the benefit of their analysis of the tests. The defense is entitled to no less assistance from Dr. Gur, who can provide an independent review of the tests in question. "One important role of expert consultants is to help counsel develop evidence." United States v. Warner, 62 M.J. 114, 118 (C.A.A.F. 2005). Defense counsel must be fully informed, with the complete confidence in the services of a defense consultant, of the meaning of medical tests performed on Mr. bin al Shibh, and the significance to his mental condition. See id. ("Another important function of defense experts is to test and challenge the Government's case.")
- 5. Dr. Gur's assistance is also necessary because the defense is entitled to an expert consultant that it can communicate with under cover of privilege. *See* M.C.R.E. 502(a),

502(b)(3). It is well established that the defense must be afforded an independent mental health professional of its own choosing. *Van White v. State*, 990 P.2d 253 (Okla. Crim App. 1999) (relying in part on *Ake*, court held that attorney-client privilege applied to expert appointed by court to aid in defense, and privilege is maintained whether or not the expert testifies); *DeFreece v. State*, 848 S.W.2d 150 (Tex. Crim. App. 1993), *cert. denied*, 114 S.Ct. 284 (1993) (court's appointed psychiatrist was inadequate pursuant to *Ake* because an indigent defendant who makes the requisite threshold showing is entitled to a partisan, not merely neutral, expert, and is also entitled to a psychiatric expert to assist with his defense, not just for examination purposes; ability to subpoena expert not enough); *Anderson v. Virginia*, 421 S.E.2d 900 (Va. Ct. App. 1992), *reh. en banc granted*, 436 S.E.2d 625 (Va.Ct.App. 1993)(en banc) (error to deny the defendant a psychologist of her own choosing where trial court appointed a private psychologist of the state's choosing, and mental state was hotly contested and crucial to sentencing).

6. Dr. Gur is ideally qualified to be a defense consultant on this matter because he is a well respected expert in the field of neuroimaging in psychiatry. Further, detailed defense counsel lacks the knowledge, education, training, or experience to review, and to formulate any opinions from those tests. A review of these tests by a qualified expert in the field of neuroimaging in psychiatry is fundamental to providing Mr. bin al Shibh an adequate defense. Such a review cannot be obtained through defense counsel's independent study or preparation.

c. What the expert assistance would accomplish.

1. Effective investigation and documentation of mental illness, potentially resulting from ill treatment, requires a thorough medical evaluation by a qualified, independent

medical expert in accordance with international standards established in the Istanbul Protocol. See D-017 (Defense Motion to Compel Expert), Attachment A, ¶ 15; see also United Nations Manual on the Effective Investigation and Documentation of Torture and Cruel, Inhumane, or Degrading Treatment or Punishment. The "Istanbul Protocol" standards of evaluation are applicable to the present case because DoD medical records from JTF-GTMO clearly state that Mr. bin al Shibh suffers from a mental health condition.. Dr. Gur is properly qualified to assist the defense in analyzing these medical records and conducting the necessary investigation.

2. "The mental capacity of the accused is an interlocutory question of fact."

R.M.C. 909(e)(1). In such a competency hearing, it is virtually certain the Commission will require the testimony of experts to determine the fact at issue. *See* M.C.R.E. 701. Accordingly, Dr. Gur *may* be required to testify at Mr. bin al Shibh's competency hearing. The defense counsel shall "have reasonable opportunity to obtain expert witnesses." M.C.R.E. 706(a). But even if Dr. Gur does not testify, his expert assistance is necessary for the defense to develop its case for the competency hearing. *See Warner*, 62 M.J. at 118 (finding abuse of discretion from trial judge's denial of defense expert, reversing conviction, and ruling that "even if the defense-requested expert consultant would not have become an expert witness, he would have assisted the defense in evaluating, identifying, and developing evidence.").

d. Why the defense counsel are unable to gather and present the evidence that Dr. Gur would be able to develop

a. The rules require that only a physician or clinical psychologist may conduct an inquiry into the mental capacity of the accused. *See* R.M.C. 706(c)(1). No current member of the defense team is a physician, much less a . It is self-evident that defense counsel lack the education, training, knowledge, and experience to read

such tests, formulate a medical opinion in their regard, and analyze them in the overall context of Mr. bin al Shibh's mental health history. *See* **D-017** (**Defense Motion to Compel Expert**), **Attachment A**, ¶ 17 ("Legal experts, including attorneys for the prosecution and the defense and adjudicators are not qualified to assess medical evidence of torture and ill treatment."). Further, the advice of an independent mental health professional cannot be obtained through independent study or preparation. The defense has been provided medical tests, without associated analyses; even with the analyses, however, defense counsel cannot reasonably be expected to fully comprehend the tests and to conduct the independent review required by law and by their ethical rules, without the assistance of Dr. Gur.

III. THE DENIAL OF DR. GUR WOULD RESULT IN A FUNDAMENTALLY UNFAIR TRIAL

- a. Mr. bin al Shibh is facing the death penalty. "Death, in its finality, differs more from life imprisonment than a 100-year prison term differs from one of only a year or two. Because of the qualitative difference, there is a corresponding difference in the need for reliability in the determination that death is the appropriate punishment in a specific case." *Woodson v. North Carolina*, 428 U.S. 280, 304-305 (1976). "It is vain to give the accused a day in court, with no opportunity to prepare for it, or to guarantee him counsel without giving the latter any opportunity to acquaint himself with the facts or law of the case." *Powell v. State of Ala.*, 287 U.S. 45, 59 (1932). The defense is merely asking to be provided the tools, in the form of an expert, to acquaint itself with the medical evidence of the case, so as to afford Mr. bin al Shibh an adequate defense.
- b. The right to appropriate, independent mental health experts is explicit in the American Bar Association Guidelines for the Appointment and Performance of Defense Counsel in Death

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Penalty Cases, which establish the required standard of care for capital representation. See ABA REVISED GUIDELINES FOR THE APPOINTMENT AND PERFORMANCE OF DEFENSE COUNSEL IN DEATH PENALTY CASES, 31 Hofstra Law Review 913, 1029 (Summer 2003) (hereinafter "ABA Guidelines"); see also Wiggins v. Smith, 123 S. Ct. 2527 (2003) (the Court has "long looked" to the ABA Guidelines as "well-established norms" for performance of counsel in capital cases); Rompilla v. Beard, 545 U.S. 374 (2005). Indeed, the ABA Guideline approach removes the government from the equation wherever possible, by instructing responsible agencies to construct a "Legal Representation Plan" that funds defense experts for indigent defendants through the public defenders office or through some other governmental agency, independent of the prosecutors. See id. at 952, ABA Guideline 4.1 ("The Defense Team and Supporting Services"[...] The Legal Representation Plan should provide for counsel to receive the assistance of all expert, investigative, and other ancillary professional services reasonably necessary or appropriate to provide high quality legal representation at every stage of the proceedings... [c]ounsel should have the right to have such services provided by persons independent of the government.).

c. In this capital case, defense counsel would not be able to effectively represent Mr. bin al Shibh, and fulfill their ethical obligations to fully explore the competency issue, without the assistance of the requested expert. In this context, the request for Dr. Gur is analogous to the duty of defense counsel to investigate and present evidence in mitigation. *See Wiggins v. Smith*, 539 U.S. 510 (2003) (holding that counsel's failure to investigate the accused's background and to present mitigating evidence violated the accused's Sixth Amendment right to effective assistance of counsel); *see also Eddings v. Oklahoma*, 455 U.S. 104, 112, 102 S.Ct. 869 (1982) (noting that the consideration of the offender's life history is a "part of the process of inflicting

the penalty of death."); *Lockett v. Ohio*, 438 U.S. 586, 604, 98 S.Ct. 2954 (1978) (invalidating Ohio law that did not permit consideration of aspects of a defendant's background). This legal authority defining the defense duty to seek mitigation and other defense evidence affecting the merits, with the assistance of a mitigation specialist, has been held to be directly applicable under military law. *See United States v. Kreutzer*, 61 M.J. 293, 298 (C.A.A.F. 2005) ("Where such a request [for mitigation expert] is erroneously denied, that ruling implicates the right to present a defense, compulsory process, and due process conferred by the Constitution..."). But, the question here is even more complex than whether the death penalty applies, as it touches on highly specialized and thorny medical questions. *See Ford v. Wainright*, 477 U.S. 399, 426, 106 S.Ct. 2595, ("unlike the determination of whether the death penalty is appropriate in a particular case, the competency determination depends substantially on expert analysis in a discipline fraught with 'subtleties and nuances.' "), quoting *Addington v. Texas*, 441 U.S. 418, 429-430, 99 S.Ct. 1804 (1979).

A complete understanding of Mr. bin al Shibh's current mental state, including a proper analysis of medical tests performed on him, is critical to assisting defense counsel in continuing to provide him with adequate counsel assistance in this death penalty case. Quashing defense counsel's ability to try and understand the medical evidence at issue here will result in a fundamentally unfair trial.

7. Request for Oral Argument:

The defense requests oral argument as it is entitled to pursuant to R.M.C. 905(h), which provides that "Upon request, either party is entitled to an R.M.C. 803 session to present oral argument or have evidentiary hearing concerning the disposition of written motions." Oral argument will allow for proper consideration of the issues raised by this motion.

8. <u>Conference with Opposing Counsel</u>: On 24 June 2009, the defense conferred with the Prosecution regarding its requested relief. The prosecution opposes this motion.

9. <u>Attachments</u>:

- A. Memorandum for the Convening Authority, Subj: Request for Appointment of Expert Consultant Dr. Ruben C. Gur, M.A., Ph.D., to Defense Team ICO *United States v. Mohammed, et. al.* (Ramzi bin al Shibh), dated 9 January 2009
- B. Curriculum Vitae of Dr. Gur
- C. Memorandum for Defense, Subj: Denial of Request for Expert Consultant dated 13 January 2009

Respectfully submitted,

CDE SUZANNE

CDR SUZANNE LACHELIER, JAGC, USNR

Detailed Defense Counsel for

Ramzi bin al Shibh

Office of the Chief Defense Counsel

Office of Military Commissions

1600 Defense Pentagon, Room 3B688

Washington, DC 20301

By:

LT RICHARD E.N. FEDERICO, JAGC, USN

Detailed Defense Counsel for

Ramzi bin al Shibh

Office of the Chief Defense Counsel

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1600 Defense Pentagon, Room 3B688

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ATTACHMENT A

Office of the Chief Defense Counsel Office of the Military Commissions 1600 Defense Pentagon, Rm. 3B688 Washington DC 20301 Phone: (703) 588-0407

Fax: (703) 588-2036/2047

9 January 2009

MEMORANDUM FOR THE CONVENING AUTHORITY

Subj: REQUEST FOR APPOINTMENT OF CONSULTANT DR. RUBEN C. GUR, M.A., PH.D., TO DEFENSE TEAM ICO UNITED STATES V. MOHAMMED, ET AL. (RAMZI BIN AL SHIBH)

1. Defense counsel for Mr. Ramzi bin al Shibh respectfully request the Convening Authority to order the appointment and funding for Dr. Ruben C. Gur, M.A., Ph.D., to serve as a defense expert consultant in the field of neuroimaging in psychiatry.

2. Qualifications:

Dr. Gur is a licensed clinical psychologist who possesses a Masters degree and Doctorate in clinical psychology from Michigan State University. He has been an assistant, associate professor, or professor at University of Pennsylvania School of Medicine since 1974. Dr. Gur is the Director of Neuropsychology and the Brain Behavior Laboratory, Department of Psychiatry at the Hospital of the University of Pennsylvania since 1984.

Dr. Gur possesses the following board specialty certification: Diplomate in Clinical Neuropsychology; and American Board of Professional Psychology.

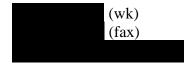
Dr. Gur has received the following awards, honors and membership: Elected to Fellow status, National Academy of Neuropsychologists, 1986; Elected to Fellow status, American Psychological Association, Divisions 6 & 30, 1987; Recipient of 1990 Stephen V. Logan Award, National Alliance for the Mentally Ill (NAMI); and was Elected to Fellow status, The American Psychological Society, 1992.

Along with providing consultation, training and clinical services in his field for more than 30 years, Dr. Gur has conducted and supervised research in the field of neuroimaging in psychiatry; he has authored books in the field, as well as numerous professional articles which have been published in peer-reviewed journals. Additionally, Dr. Gur has a patent with respect to: "Behavioral Imaging: Topographic Display of Neuropsychological Data", U.S. Patent No. 4862359.

For your review, attached is Dr. Gur's Curriculum Vitae.

Subj: REQUEST FOR APPOINTMENT OF CONSULTANT DR. RUBEN C. GUR, M.A., PH.D., TO DEFENSE TEAM ICO UNITED STATES V. MOHAMMED, ET AL. (RAMZI BIN AL SHIBH)

3. Dr. Gur's contact information:



- 4. Complete statement of reasons why Dr. Gur is necessary:
 - a. Why the expert consultant is needed:
 - i. According to the discovery the defense has been able to review, Mr. bin al Shibh was diagnosed with a mental disease that has resulted in his being prescribed (during his time in the custody of JTF-GTMO)
 - ii. This discovery also indicates that certain medical tests were performed on Mr. bin al Shibh. These tests include, but are not limited to,

iii. A complete understanding of Mr. bin al Shibh's current mental state, in light of his full history and particularly his history of the last six years is critical to assisting defense counsel in continuing to provide him with adequate counsel assistance. The presence of some mental health issue has a direct impact on defense counsel's duties in defending this case and affording Mr. bin al Shibh an adequate defense. Defense counsel must be fully informed, with the complete confidence in the services of a defense consultant, of the ramifications of Mr. bin al Shibh's mental condition. *See Warner*, 62 M.J. at 118 ("One important role of expert consultants is to help counsel develop evidence"). Counsel, moreover, must be prepared to understand, and possibly challenge, the evaluation

Subj: REQUEST FOR APPOINTMENT OF CONSULTANT DR. RUBEN C. GUR, M.A., PH.D., TO DEFENSE TEAM ICO UNITED STATES V. MOHAMMED, ET AL. (RAMZI BIN AL SHIBH)

of any government-directed mental health expert. *See id.* ("Another important function of defense experts is to test and challenge the Government's case."); *see also, Ake v. Oklahoma*, 470 U.S. 68, 105 S.Ct. 1087 (1985)(ruling that government must assure access of services of competent mental health expert to assist with preparation of possible defense).

b. Why Dr. Gur is necessary:

i. The detailed defense counsel lacks the knowledge, education, training, or experience to review

a qualified expert in the field of neuroimaging in psychiatry is fundamental to providing Mr. bin al Shibh an adequate defense

fundamental to providing Mr. bin al Shibh an adequate defense. Such a review cannot be obtained through independent study or preparation.

ii. Dr. Gur is ideally qualified to be a defense consultant because he is a well respected expert in the field of neuroimaging in psychiatry.

5. Estimated Cost:

a. Total hours/days and total cost:

Dr. Gur's fee is \$400.00 per hour, and he estimates the time necessary for this case to require 15 hours, including time for consultation, analysis, and/or review. This request does not include any time for testifying, or preparing for testimony, should such services become necessary. The defense therefore requests authorization for up to \$6,000.00 in fees for Dr. Gur.

b. Total days TDY at the per diem rate

None requested at present, if the defense is able to provide the records to Dr. Gur rather than him having to travel to Guantanamo Bay to conduct a review of the records and an assessment.

c. Travel costs, if any:

Dr. Gur would require payment for travel expenses from his residence in Philadelphia, PA to Guantanamo Bay, Cuba, and for lodging during the time he will be away from his residence.

d. Rate for professional services and hours/days (when travel is not involved):

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\$400.00 per hour for consultative services

e. Inconvenience fee, if any:

None requested.

- 6. On 9 January 2009, I notified the opposing party of this request.
- 7. If approved, a Memorandum of Agreement, detailing the terms contained herein, will be signed by Dr. Gur and returned to you for signature. *See* Regulation for Trial by Military Commission, 13-7. In the event this request is denied, the defense respectfully requests a written response that details the reasons for the denial. Should you require further information, please contact detailed counsel at

Respectfully Submitted,

By: Suzanne M. Lachelier

CDR Suzanne M. Lachelier, JAGC, USNR LT Richard E.N. Federico, JAGC, USN Detailed Defense Counsel for Mr. Ramzi bin al Shibh

Office of the Chief Defense Counsel Office of the Military Commissions 1600 Defense Pentagon, Room 3B688 Washington, D.C. 20301

cc:

Mr. Clay Trivett, Trial Counsel

Attachment:

(1) Curriculum Vitae for Dr. Gur

UNIVERSITY OF PENNSYLVANIA - SCHOOL OF MEDICINE Curriculum Vitae

Date: Decamber 2008

Ruben C. Gur, Ph.D.

HOME ADDRESS:

OFFICE ADDRESS: Brain Behavior Laboratory

Department of Psychiatry

10 Gates Building

University of Pennsylvania Philadelphia, PA 19104-4283

EDUCATION: 1967-70 B.A. Hebrew University of Jerusalem

1970-71 M.A. Michigan State University 1971-73 Ph.D. Michigan State University

1973-74 Postdoctoral Fellowship, Stanford University

POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:

Doctorate: 1971 NIMH

Summer Traineeship, Psychiatric Clinic

Oakland County Juvenile Court

Pontiac, Michigan

1971-72 Psychology Internship, Psychiatric Clinic

State Prison of Southern Michigan

Jackson, Michigan

1972-73 Psychology Internship, Counseling Center

Michigan State University East Lansing, Michigan

Postdoctorate: 1973-74 Research Associate, Department of Psychology

Stanford University, Stanford, California

1974-76 Postdoctorate supervised clinical experience

Department of Psychiatry University of Pennsylvania

MILITARY SERVICE: 1965-67 Israeli Defense Forces

FACULTY APPOINTMENTS:

1974-81 Assistant Professor

Department of Psychology

University of Pennsylvania School of Medicine

Philadelphia, PA

1981-84 Research Associate Professor of Psychology

in Neurology and Psychiatry

University of Pennsylvania School of Medicine

Philadelphia, PA

1984-88 Associate Professor of Psychology in

Psychiatry and Neurology

University of Pennsylvania School of Medicine

Philadelphia, PA

1988-Present Professor of Psychology in Psychiatry,

Neurology and Radiology

University of Pennsylvania School of Medcine

Philadephia, PA

HOSPITAL AND ADMINISTRATIVE APPOINTMENTS:

1974-81 Supervisor, Clinical Training Program

Department of Psychology

University of Pennsylvania School of Medicine

Philadelphia, PA

1982-84 Director of Neuropsychology

Department of Neurology The Graduate Hospital Philadelphia, PA

1984-Present Director of Neuropsychology and the

Brain Behavior Laboratory, Department of Psychiatry

Hospital of the University of Pennsylvania

Philadelphia, PA

2005-Present Director of the Center for Neuroimaging in Psychiatry

Department of Psychiatry

Hospital of the University of Pennsylvania

Philadelphia, PA

2005-Present Staff Psychologist

Philadelphia Veterans Administration Hospital

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Philadelphia, PA

BOARD SPECIALTY CERTIFICATION:

Diplomate in Clinical Neuropsychology American Board of Professional Psychology

LICENSURE: Licensed Psychologist, Commonwealth of Pennsylvania

AWARDS, HONORS AND MEMBERSHIP IN HONORARY SOCIETIES:

Erickson Award for Scientific Excellence for Writing in Hypnosis NARSAD Distinguished Investigator Award Member, Sigma Xi Elected to Fellow status, National Academy of Neuropsychologists, 1986 Elected to Fellow status, American Psychological Association, Divisions 6 & 30, 1987 Recipient of 1990 Stephen V. Logan Award, National Alliance for the Mentally Ill (NAMI) Elected to Fellow status, The American Psychological Society, 1992

MEMBERSHIP IN PROFESSIONAL AND SCIENTIFIC SOCIETIES:

American Psychological Association, FELLOW American Psychological Society, FELLOW American College of Neuropsychopharmacology The John Morgan Society American Association for the Advancement of Science International Neuropsychological Society National Academy of Neuropsychologists The New York Academy of Science International Society for Neuroimaging in Psychiatry

EDITORIAL/ADVISORY POSITIONS:

Member, NIH Study Section on Clinical Neuroscience and Biological Psychopathology (1993-1996)

Editorial Board: Archives of Clinical Neuropsychology (1985-1997), Journal of Mental Imagery (1984-present), Brain and Cognition (1989-present), Brain and Language (1990-present), Brain Imaging and Behavior (1994-present; founding member), Social Neuroscience (founding member). Consultant to Panel on Neurological Aspects of Behavior: Development of a National Research Strategy for NIH (1979) Schizophrenia Research (2004-present)

Advisory Board: The Greenwall Initiative on Imaging and Treating the Human Brain: Ethical and Social Implications. The Center for Bioethics, University of Pennsylvania; Institute for Strategic Threat Analysis and Response (ISTAR), University of Pennsylvania, (2002-) The Conte Center on the Neurobiology of Suicide, Columbia University (J Mann, MD, PI), Boston Center for Intervention Development and Applied Research (CIDAR is a NIMHsponsored program project, "Vulnerability to Progression in Schizophrenia".

Action Editor: Brain and Cognition (2002-present)

ACADEMIC COMMITTEES AT THE UNIVERSITY OF PENNSYLVANIA:

1975-1977	Admissions Committee, Psychology Department
1984-1994	Research Committee, Psychiatry Department
1984-1987	Computer Task Force, Psychiatry Department
1984-1988	Chairman's Council for Planning and Development, Psychiatry Department
1990-1992	Senate Committee on Academic Freedom and Responsibility
1996-1998Search Committee for Chair of Radiology	
2000-2002	Search Committee for fMRI Physicist
1999-Present	University Scholars Council

MAJOR TEACHING & CLINICAL RESPONSIBILITIES AT THE UNIVERSITY OF PENNSYLVANIA:

A. Teaching:

- 1. Co-founder and Advisor, Biological Basis of Behavior Undergraduate Major program.
- 2. Supervisor of postdoctoral Fellows (NIMH Training Grant) and doctoral students
- 3. Member of dissertation committees.
- 4. Rounds and teaching conferences for Psychiatry residents and Neuropsychology Fellows
- 5. Supervisor of undergraduate Honors theses.

B. Clinical:

- 1. Director of Neuropsychology, Department of Psychiatry, Hospital of the University of Pennsylvania
- 2. Supervisor of interns and practicum students in neuropsychology.
- 3. Director of Forensic Neuropsychiatry Center.

PRESENTATIONS & LECTURES BY INVITATION: (Outside Philadelphia, Past 5 years)

- March 4, 2002. "Imaging Studies of Emotion Processing Examining the Effects of Age, Gender, and Disease." University of Iowa School of Medicine, Research Seminar, Iowa City, IA
- March 5, 2002. "Behavioral and Neurobiologic Markers of Brain Dysfunction and Genetic Vulnerability to Schizophrenia." University of Iowa School of Medicine, Grand Rounds. Iowa City, IA
- April 14, 2002. "The Neurobiology of Sex Differences in the Symptoms and Course of Schizophrenia" Advocates for the Jewish Mentally Ill, Wynnewood, PA
- May 5, 2002. "The Science of Deceit: The Polygraph and its Progeny" Judicial In Service Training, Washington D.C.
- May 22, 2002. "Functional and Structural Imaging Studies of Emotion Processing" Massachusetts General Hospital, Grand Rounds, Charlestown, MA
- Oct 10, 2002. "What to do About Girls, Boys and Brains: Sex Differences From Phylogeny to

- Ontogeny" CAIS Commission of Women in Independent School's Annual Conference, Farmington, CT
- Oct 23, 2002. "Neurobehavioral Measures as Endophenotypic Markers in Schizophrenia" State University of New York, Grand Rounds, Albany, NY
- November 1, 2002 "Sex Differences in Learning" Learning and the Brain Conference, Cambridge, MA
- November 2, 2002 "Imaging and Other Brain Function Issues" The Third National Seminar on Mental Health and the Criminal Law, Atlanta, GA
- November 29, 2002 "Integration of Behavior, Anatomy and Physiology in the Search for Neural Substrates of Cognitive and Emotion Processing in Healthy People" 12th Australian Society for Psychophysiology Conference. University of Sydney, Australia
- November 8, 2002 "Bio-Cognitive Aspects of Schizophrenia" Psychology Senior Seminar, Haverford College, Haverford, PA
- January 15, 2003 "Adolescent Brain Development, Executive Functions, and Culpability" American Bar Association, Washington, D.C.
- February 14, 2003 "Neural Substrates of Emotion Processing" Psychiatric Research Society, Park City, Utah
- May 12, 2003 "The New Era of Neuropsychology; Neural Systems Probed Behaviorally and with Imaging" Mayo Clinic, Rochester, Minnesota
- May 29, 2003 "Cognitive Impairment in Schizophrenia" 43rd Annual New Clinical Drug Evaluation Unit, Boca Raton, FL
- September 21, 2003 "The Measurement of Emotion Processing: Exploring the Dark Side of the Moon" 3rd US-Korean Workshop on Psychiatric Genetics, Seoul, Korea
- November 29, 2003 Neuroimaging studies in schizophrenia". Keynote to Symposium: Kognitive Störungen bei schizophrenen Erkrankungen III: Negative and positive symptoms in schizophrenia models, methods and results. Ruhr-Universität Bochum Internationales Begegnungszentrum, Bochum, Germany.
- December 11, 2003 "Developmental Differences Between Adolescents and Adults" Illinois Juvenile Justice Symposium, Chicago, Illinois.
- February 11, 2004 "Information Processing in Schizophrenia: an fMRI study" Psychiatric Research Society, Park City, Utah.
- February 25, 2004 "Implications of New Brain Imaging Research to Criminal Culpability of Adolescents" Briefing on Adolescent Development, National Press Club, Washington D.C.
- March 9, 2004 "Facial Recognition as an Endophenotypic Marker in Autism" NIH sponsored

Autism Genetics In the Pacific Rim, University of California - Los Angeles Medical Center. Los Angeles, California.

- April 1, 2004 "Teaching Science to Myelinating and Pruning Brains Constructed During the Middle Pleistocene Epoch: The Challenge of Dealing with Brain Maturation in Boys and Girls." NSTA, National Science Teachers Association, Atlanta, Georgia.
- May 21st, 2004 "Using Brain Research in Juvenile Representation" Southwest Regional Juvenile Defender Center's (SWJDC) 2004 Regional Summit, Zealous Advocacy = Best Interests, Houston, Texas.
- June 17th, 2004 "Research in Family Schizophrenia" Harrisburg State Hospital, Harrisburg, Pennsylvania.
- June 21, 2004 "Psychopharmacology of Emotions" 24th Annual Collegium Internationale Neuro-Psychopharmacolgicum (CINP) Congress-Paris. Paris, France.
- June 23, 2004 "Endophenotypic Measures in Brain Behavior Studies in Schizophrenia" Bordeaux University, Bordeaux, France.
- July 24, 2004 "The Developing Brain and the Technology That Let's Us See It" 25th Annual Capital Punishment Training Conference, Warrenton, Virginia.
- September 16, 2004 "Are Sex Differences in Brain Anatomy and Physiology Related to Sex Differences in Emotion Regulation, Personality, and Aggression?" Sex, Brain and Human Aggression Conference, Delmenhorst, Germany.
- October 18, 2004 "Recent Discoveries of Cognitive Neuroscience Using Brain Imaging" Brain Imaging and the Cognitive Sciences Conference, Washington, D.C.
- April 2, 2005 "Episodic Memory and Affective Processing in Schizophrenia" The 7th Biennial Mt. Sinai Conference on Cognition in Schizophrenia, Savannah, GA.
- April 11, 2005 "Brain Development and its Relevance to the Juvenile Death Penalty" Cornell Law School; Prof Blume's class, Ithaca, NY.
- April 11, 2005 "Aggression and Deception: Some Legal Implications of Recent Advances in Neuroimaging and Neuroscience, Cornell Law School, Ithaca, NY.
- April 22, 2005 "Understanding Brain Development" The National Seminar on the Development and Integration of Mitigation Evidence, Salt Lake City, UT.
- April 22, 2005 "Schizophrenia: The Positive and Negative Symptoms" The National Seminar on the Development and Integration of Mitigation Evidence, Salt Lake City, UT.
- August 18, 2005 "Emotion: The Unwelcome Guest at the Cognitive Party" Ben Gurion University of the Negev, Beersheva, Israel.
- September 10, 2005 "Brain 101: Knowing Brain Development, Function and Disorder can Save

- Your Client's Life." Florida Public Defenders Association: Life Over Death Conference, Orlando, FL.
- November 18, 2005 "The Developing Adolescent Brain" OPD, Capital Defense Division Capital Training Seminar, Baltimore, MD.
- November 28, 2005 "Emotion: The Dark Side of Cognition. Insights from Neuroimaging Studies in Men and Women" University of Delaware, Newark, DE.
- November 28, 2005 "Verify with MRI? Functional Imaging in the Context of Lie Detection." University of Delaware, Newark, DE.
- February 10, 2006 "A Slice of Emotions: Neurobehavioral and (thinly sliced) fMRI Studies" Psychiatric Research Society Annual Meeting, Park City, UT.
- April 7, 2006. "The Developing Brain: Judgement and Impulse Control" Indigent Criminal Defense: Advanced Skills for the Experienced Practitioner Conference, Richmond, VA.
- July 12, 2006. "Sex Differences in Cerebral Function and Morphology in Mental Illness" CINP Symposium, Chicago, IL.
- August 25, 2006. "Brain Structure and Function: New Frontiers. 11th Annual Federal Habeas Corpus Center, Pittsburgh, PA.
- August 31, 2006. "Neuroimaging in the Study of Cognition and Emotion" Astra Zeneca, Wilmington, DE.
- September 15, 2006. "Imaging in Schizophrenia" The International Symposium on Schizophrenia, Gottingen Research Association for Schizophrenia, Gottingen, Germany.
- September 29, 2006 "The Inherent Mitigation of Youth: Brain Development in Adolescents and Young Adults. Making the Case for Life Conference, Las Vegas, NV.
- November 13, 2006 "Brain Behavior Relationship of Normal and Disturbed Emotions in Schizophrenia and Autism" DFG International Research Training Group, Aachen University, Aachen, Germany.
- April 20, 2007 "Gender Differences in Cerebral Function and Morphology in Normal Subjects. Advances in Neuroscience Conference, Napoli, Italy.
- October 6, 2007 "Brain Function, Gender and Age" ASTAR National Judges' Science School. Baltimore, MD.
- October 11, 2007 "Neurobiology of Sex Differences: Potential Relevance to Women in Science" Women's Leadership Board Meeting, Cambridge, MA.
- November 16, 2007 "Brain Imaging" Ohio Association of Criminal Defense Lawyers. Columbus, Ohio.

April 2, 2008 "Cutting Edge Neuroscience" Capital Habeas Corpus Unit Conference, Fort Lauderdale, FL.

- November 7, 2008 "Some Advances in Cognitive and Affective Neuroscience with Potential Legal Relevance: Neuroimaging of Brain and Behavior" Institute for Social Science Faculty Fellows and Law faculty, Cornell University, Ithaca, New York
- November 8, 2008 "Brain Development in Healthy and Vulnerable Populations: Lessons from Neuroimaging and Behavioral Measures", Joint Human Development, Psychology and Center for Behavioral Economics and decision Science Colloquium, Cornell University, Ithaca, New York
- Nov. 19, 2008 "Is fear special? Studies on the affective neuroscience of schizophrenia" Grand Rounds at University of Illinois in Chicago, Department of Psychiatry, Chicago, Illinois

ORGANIZING ROLES IN SCIENTIFIC MEETINGS: None.

BIBLIOGRAPHY:

Research Publications, peer reviewed:

- 1. Alexander LT, Gur RC, Gur RE, Patterson L. Peer assisted learning. <u>Improving Human Performance Quarterly</u>, 1974, <u>3</u>, 175-186.
- 2. Gur RC, Gur RE. Handedness, sex and eyedness as moderating variables in the relation between hypnotic susceptibility and functional brain asymmetry. <u>Journal of Abnormal Psychology</u>, 1974, <u>83</u>, 635-643.
- 3. Gur RC. An attention-controlled operant procedure for enhancing hypnotic susceptibility. <u>Journal of Abnormal Psychology</u>, 1974, <u>83</u>, 635-643.
- 4. Gur RE, Gur RC, Marshalek B. Classroom seating and functional brain asymmetry. <u>Journal of Educational Psychology</u>, 1975, <u>67</u>, 151-153.
- 5. Gur RC, Hilgard ER. Visual imagery and discrimination of differences between altered pictures simultaneously and successively presented. <u>British Journal of Psychology</u>, 1975, 66, 341-345.
- 6. Gur RE, Gur RC. Defense mechanisms, psychosomatic symptomatology and conjugate lateral eye movements. <u>Journal of Consulting and Clinical Psychology</u>, 1975, <u>43</u>, 416-420.
- 7. Gur RE, Gur RC, Harris LJ. Cerebral activation, as measured by subject's lateral eye movements, is influenced by experimenter location. <u>Neuropsychologia</u>, 1975, <u>13</u>, 35-44.
- 8. Gur RC, Sackeim HA, Gur RE. Classroom seating and psychopathology: some initial data. <u>Journal of Abnormal Psychology</u>, 1976, <u>85</u>, 122-124.
- 9. Gur RC, Reyher J. The enhancement of creativity via free imagery and hypnosis.

- American Journal of Clinical Hypnosis, 1976, 85, 237-249.
- 10. Sackeim HA, Packer IK, Gur RC. Hemisphericity, cognitive set and susceptibility to subliminal perception. <u>Journal of Abnormal Psychology</u>, 1977, <u>86</u>, 624-630.
- 11. Gur RE, Gur RC. Sex differences in the relations among handedness, sighting-dominance and eye acuity. <u>Neuropsychologia</u>, 1977, <u>15</u>, 585-590.
- 12. Sackeim HA, Gur RC, Saucy MC. Emotions are expressed more intensely on the left side of the face. <u>Science</u>, 1978, <u>202</u>, 434-436.
- 13. Gur RC, Sackeim HA. Self-confrontation and psychotherapy. <u>Psychotherapy</u>: <u>Theory</u>, <u>Research and Practice</u>, 1978, <u>15</u>, 258-265.
- 14. Sackeim HA, Gur RC. Lateral asymmetry in intensity of emotional expression. Neuropsychologia, 1978, 16, 473-481.
- 15. Sackeim HA, Gur RC. Self-deception, other-deception, and self-reported psychopathology. <u>Journal of Consulting and Clinical Psychology</u>, 1979, <u>47</u>, 213-215.
- 16. Gur RC, Sackeim HA. Self-deception: A concept in search of a phenomenon. <u>Journal of Personality and Social Psychology</u>, 1979, <u>37</u>, 147-169.
- 17. Sackeim HA, Nordlie JW, Gur RC. A model of hysterical and hypnotic blindness: cognition, motivation and awareness. <u>Journal of Abnormal Psychology</u>, 1979, <u>88</u>, 474-489.
- 18. Gur RC, Reivich M. Cognitive task effects on hemispheric blood flow in humans: evidence for individual differences in hemispheric activation. <u>Brain and Language</u>, 1980, <u>9</u>, 78-92.
- 19. Gur RC, Packer IK, Hungerbuhler JP, Reivich M, Obrist WD, Amarnek WS, Sackeim HA. Differences in the distribution of gray and white matter in human cerebral hemispheres. Science, 1980, 207, 1226-1228.
- 20. Sackeim HA, Greenberg MS, Weiman AL, Gur RC, Hungerbuhler JP, Geschwind N. Hemispheric asymmetry in the expression of positive and negative emotions: Neurological Evidence. Archives of Neurology, 1982, 39, 210-218.
- 21. Gur RC, Sussman NM, Alavi A, Gur RE, Rosen AD, O`Connor M, Goldberg HI, Greenberg JH, Reivich M. Positron emission tomography in two cases of childhood epileptic encephalopathy (Lennox-Gastaut Syndrome). Neurology, 1982, 32, 1191-1194.
- 22. Gur RC, Gur RE, Obrist WD, Hungerbuhler JP, Younkin D, Rosen AD, Skolnick BE., Reivich M. Sex and handedness differences in cerebral blood flow during rest and cognitive activity. <u>Science</u>, 1982, <u>217</u>, 659-661.
- 23. Sussman NM, Gur RC, Gur RE, O'Connor MJ. Mutism as a consequence of callosotomy. <u>Journal of Neurosurgery</u>, 1983, <u>59</u>, 514-519.
- 24. Gur RC, Gur RE, Rosen AD, Warach S, Alavi A, Greenberg J, Reivich M. A cognitive-

motor network demonstrated by positron emission tomography. <u>Neuropsychologia</u>, 1983, 21, 601-606.

- 25. Natale M, Gur RE, Gur RC. Hemispheric asymmetries in processing emotional expressions. Neuropsychologia, 1983, 21, 555-565.
- 26. Reivich M, Gur RC, Alavi A. Positron emission tomography studies of sensory stimuli, cognitive processes and anxiety. <u>Human Neurobiology</u>, 1983, <u>2</u>, 25-33.
- 27. Gur RE, Skolnick BE, Gur RC, Caroff S, Rieger W, Obrist WD, Younkin D, Reivich M. Brain function in psychiatric disorders: I. Regional cerebral blood flow in medicated schizophrenics. <u>Archives of General Psychiatry</u>, 1983, 40, 1250-1254.
- 28. Gur RE, Gur RC, Sussman NM, O'Connor MJ, Vey MM. Hemispheric control of the writing hand: The effect of callosotomy in a left-hander. Neurology, 1984, 34, 904-908.
- 29. Reivich M, Alavi A, Gur RC. Positron emission tomographic studies of perceptual tasks. <u>Annals of Neurology</u>, 1984, <u>15</u>, 61-65 (Supplement).
- 30. Gur RE, Skolnick BE, Gur RC, Caroff S, Rieger W, Obrist WD, Younkin D, Reivich M. Brain function in psychiatric disorders: II. Regional cerebral blood flow in medicated depressives. <u>Archives of General Psychiatry</u>, 1984, 41, 695-699.
- 31. Youkin D, Hungerbuhler JP, O'Connor M, Goldberg H, Burke A, Kushner M, Hurtig H, Obrist W, Gordon J, Gur RC, Reivich M. Superficial temporal-middle cerebral artery anastomosis: Effects on vascular, neurologic, and neuropsychological functions. <u>Neurology</u>, 1985, <u>35</u>, 462-469.
- 32. Gur RE, Gur RC, Skolnick BE, Caroff S, Obrist WD, Resnick S, Reivich M. Brain function in psychiatric disorders: III. Regional cerebral blood flow in unmedicated schizophrenics. <u>Archives of General Psychiatry</u>, 1985, 42, 329-334.
- 33. Trivedi SS, Gur RC, Gur RE, Skolnick BE, Obrist WD, Reivich M, Herman GT. Imaging regional cerebral blood flow measured by the 133-Xenon technique. <u>rCBF Bulletin</u>, 1986, <u>9</u>, 175-178.
- 34. Stern MB, Gur RC, Saykin AJ, Hurtig HI. Dementia of Parkinson's disease and Alzheimer's disease: Is there a difference? <u>Journal of the American Geriatrics Society</u>, 1986, <u>34</u>, 475-478.
- 35. Gur RE, Resnick SM, Alavi A, Gur RC, Caroff S, Dann R, Silver F, Saykin AJ, Chawluk JB, Kushner M, Reivich M. Regional brain function in schizophrenia: I. A positron emission tomography study. <u>Archives of General Psychiatry</u>, 1987, <u>44</u>, 119-125.
- 36. Gur RE, Resnick SM, Gur RC, Alavi A, Caroff S, Dann R, Silver F, Saykin AJ, Chawluk JB, Kushner M, Reivich M. Regional brain function in schizophrenia: II. Repeated evaluation with positron emission tomography. <u>Archives of General Psychiatry</u>, 1987, <u>44</u>, 126-129.

37. Trope I, Fishman B, Gur RC, Sussman NM, Gur RE. Contralateral and ipsilateral control of fingers following callosotomy. <u>Neuropsychologia</u>, 1987, <u>25</u>, 287-291.

- 38. Gur RC, Gur RE, Obrist WD, Skolnick BE, Reivich M. Age and regional cerebral blood flow at rest and during cognitive activity. <u>Archives of General Psychiatry</u>, 1987, <u>44</u>, 617-621.
- 39. Gur RC, Gur RE, Resnick SM, Skolnick BE, Alavi A, Reivich M. The effect of anxiety on cortical cerebral blood flow and metabolism. <u>Journal of Cerebral Blood Flow and Metabolism</u>, 1987, <u>7</u>, 173-177.
- 40. Knight H, Millman RP, Gur RC, Saykin AJ, Doherty JU, Pack AI. Clinical significance of sleep apnea in the elderly. <u>American Review of Respiratory Disease</u>, 1987, <u>136</u>, 845-850.
- 41. Gur RC, Gur RE, Silver FL, Obrist WD, Skolnick BE, Kushner M, Hurtig HI, Reivich M. Regional cerebral blood flow in stroke: hemispheric effects of cognitive activity. <u>Stroke</u>, 1987, 18, 776-780.
- 42. Warach S, Gur RC, Gur RE, Skolnick BE, Obrist WD, Reivich M. The reproducibility of the Xe-133 inhalation technique in resting studies: task order and sex related effects in healthy young adults. Journal of Cerebral Blood Flow and Metabolism, 1987, 7, 702-708.
- 43. Trivedi SS, Gur RC. Computer graphics for neuropsychological data. <u>Proceedings of the National Computer Graphics Association</u>, 1987, <u>3</u>, 22-32.
- 44. Gur RC, Gur RE, Skolnick BE, Resnick SM, Silver FL, Chawluk JB, Muenz L, Obrist WD, Reivich M. Effects of task difficulty on regional cerebral blood flow: relationships with anxiety and performance. <u>Psychophysiology</u>, 1988, <u>25</u>, 392-399.
- 45. Schmidt ML, Gur RE, Gur RC, Trojanowski JQ. Intraneuronal and extracellular neurofibrillary tangles exhibit mutually exclusive cytoskeletal antigens. <u>Annals of Neurology</u>, 1988, <u>23</u>, 184-189.
- 46. Resnick SM, Gottlieb GL, Gur RE, Gur RC, Forciea MA, Zimmerman RA, Malamut B, Saykin AJ, Reivich M, Alavi A. Identical twins with probable Alzheimer's Disease: behavior, anatomy and physiology. <u>Neuropsychiatry</u>, <u>Neuropsychology</u> and <u>Behavioral Neurology</u>, 1988, <u>1</u>, 61-72.
- 47. Gur RC, Trivedi SS, Saykin AJ, Gur RE. "Behavioral imaging" a procedure for analysis and display of neuropsychological test scores: I. Construction of algorithm and initial clinical evaluation. <u>Neuropsychiatry</u>, <u>Neuropsychology and Behavioral Neurology</u>, 1988, <u>1</u>, 53-60.
- 48. Gur RC, Saykin AJ, Blonder LX, Gur RE. "Behavioral imaging": II. Application of the quantitative algorithm to hypothesis testing in a population of hemiparkinsonian patients. Neuropsychiatry, Neuropsychology and Behavioral Neurology, 1988, 1, 87-96.
- 49. Gottlieb GL, McAllister TW, Gur RC. Depot neuroleptics in the treatment of behavioral disorders in patients with Alzheimer's disease. <u>Journal of the American Geriatric Society</u>,

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Ruben C. Gur, Ph.D.

1988, 36, 619-621.

- 50. Gottlieb GL, Gur RE, Gur RC. Reliability of psychiatric scales in patients with DAT. American Journal of Psychiatry, 1988, 145, 857-860.
- 51. Resnick SM, Gur RE, Alavi A, Gur RC, Reivich M. Positron emission tomography and subcortical glucose metabolism in schizophrenia. <u>Psychiatry Research</u>, 1988, <u>24</u>, 1-11.
- 52. Trope I, Rozin P, Gur RC. Validation of the lateral limits technique with a callosotomy patient. Neuropsychologia, 1988, 26, 673-684.
- 53. Blonder LX, Gur RE, Gur RC. The effects of right and left hemiparkinsonism on prosody. Brain and Language, 1989, 36 193-207.
- 54. Trivedi SS, Gur RC. Topographic mapping of cerebral blood flow and behavior. <u>Computers in Biology and Medicine</u>, 1989, <u>19</u>, 219-229.
- 55. Blonder LX, Gur RE, Gur RC, Saykin AJ, Hurtig HI. Neuropsychological functioning in hemiparkinsonism. <u>Brain and Cognition</u>, 1989, <u>9</u>, 177-190.
- 56. Saykin AJ, Gur RC, Sussman NM, Gur RE. Memory deficits before and after temporal lobectomy: Effect of laterality and age of onset. <u>Brain and Cognition</u>, 1989, <u>9</u>, 191-200.
- 57. Gur RE, Resnick SM, Gur RC. Laterality and frontality of cerebral blood flow and metabolism in schizophrenia: relationship to symptom specificity. <u>Psychiatry Research</u>, 1989, 27, 325-334.
- 58. Trojanowski JQ, Schmidt ML, Otvos L, Gur RC, Gur RE, Hurtig H, Lee VMY. Selective expression of epitopes in multi-phosphorylation repeats of the high and middle molecular weight neurofilament proteins in alzheimer neurofibrillary tangles. <u>Annals of Medicine</u>, 1989, <u>21</u>, 113-116.
- 59. Erwin RJ, Mawhinney-Hee M, Gur RC, Gur RE. Effects of task and gender on EEG indices of hemispheric activation: similarities to previous rCBF findings. Neuropsychiatry, Neuropsychology, and Behavioral Neurology, 1989, 2, 248-260.
- 60. Sperling MR, Gur RC, Alavi A, Gur RE, Resnick S, Oconnor MJ, Reivich M. Subcortical Metabolic Alterations in Partial Epilepsy. <u>Epilepsia</u>, 1990, <u>31</u>, 145-155.
- 61. Gur RC, Saykin AJ, Benton A, Kaplan E, Levin H, Kester DB, Gur RE. "Behavioral imaging": III. Inter-rater agreement and reliability of weightings. Neuropsychology, and Behavioral Neurology, 1990, 3, 113-124.
- 62. Gur RE, Gur RC. Gender differences in regional cerebral blood flow. <u>Schizophrenia Bulletin</u>, 1990, <u>16</u>, 247-254.
- 63. Stafiniak P, Saykin AJ, Sperling MR, Kester DB, Robinson LJ, O'Connor MJ, Gur RC. Acute naming deficits following dominant temporal lobectomy: prediction by age at first risk for seizures. Neurology, 1990, 40, 1509-1512.

64. Gur RE, Gur RC, Saykin AJ. Neurobehavioral studies in schizophrenia: implications for regional brain dysfunction. <u>Schizophrenia Bulletin</u>, 1990, <u>16</u>, 445-451.

- 65. Gur RC, Saykin AJ, Muenz LR, Trivedi S, Gur RE. Response to Yeo et al.'s critique of behavioral imaging. Neuropsychiatry, Neuropsychology, and Behavioral Neurology, 1990, 3, 304-312.
- 66. Kohn MI, Tanna NK, Herman GT, Resnick SM, Mozley PD, Gur RE, Alavi A, Zimmerman RA, Gur RC. Analysis of brain and CSF volumes from magnetic resonance imaging: methodology, reliability and validation. <u>Radiology</u>, 1991, <u>178</u>, 115-122.
- 67. Gur RE, Mozley D, Resnick SM, Levick S, Erwin R, Saykin A, Gur RC. Relations among clinical scales in schizophrenia: overlap and subtypes. <u>American Journal of Psychiatry</u>, 1991, 148, 472-478.
- 68. Gur RC, Mozley PD, Resnick SM, Gottlieb GE, Kohn M, Zimmerman R, Herman G, Atlas S, Grossman R, Berretta D, Erwin R, Gur RE. Gender differences in age effect on brain atrophy measured by magnetic resonance imaging. Proceedings for the National Academy of Sciences, 1991, 88, 2845-2849.
- 69. Gur RE, Mozley PD, Resnick SM, Shtasel D, Kohn M, Zimmerman R, Herman G, Atlas S, Grossman R, Erwin R, Gur RC. Magnetic resonance imaging in schizophrenia: I. Volumetric analysis of brain and cerebrospinal fluid. <u>Archives of General Psychiatry</u>, 1991, 48, 407-412.
- 70. Saykin AJ, Gur RC, Gur RE, Mozley D, Mozley LH, Resnick SM, Kester DB, Stafiniak P. Neuropsychological function in schizophrenia: selective impairment in memory and learning. Archives of General Psychiatry, 1991, 48, 618-624.
- 71. Reinecke LJ, Kester DB, Saykin AJ, Kaplan EF, Gur RC. Comparison of two short forms of the Wisconsin Card Sorting Test. <u>Archives of Clinical Neuropsychology</u>, 1991, <u>6</u>, 27-33.
- 72. Kester DB, Saykin AJ, Sperling MR, O'Connor MJ, Robinson LJ, Gur RC. Acute effect of anterior temporal lobectomy on musical processing. <u>Neuropsychologia</u>, 1991, <u>29</u>, 703-708.
- 73. Shtasel DL, Gur RE, Mozley PD, Richards J, Taleff MM, Heimberg C, Gallacher F, Gur RC. Volunteers for biomedical research: recruitment and screening of normal controls. <u>Archives of General Psychiatry</u>, 1991, <u>48</u>, 1022-1025.
- 74. Erwin RJ, Mawhinney-Hee M, Gur RC, Gur RE. Midlatency auditory evoked responses in schizophrenia. Biological Psychiatry, 1991, 30, 430-442.
- 75. Trope I, Rozin P, Kemler Nelson D, Gur RC. Information processing in the separated hemispheres of callosotomy patients: does the analytic-holistic dichotomy hold? <u>Brain and Cognition</u>, 1992, 19, 123-147.
- 76. Gur RE, Gur RC. Neurotransmitters are important, but so is metabolism. Neuropsychopharmacology, 1992, 7, 63-65.

77. Malamut BL, Graff-Radford N, Chawluk J, Grossman RI, Gur RC. Memory in a case of bilateral thalamic infarction. <u>Neurology</u>, 1992, <u>42</u>:163-169.

- 78. Warach S, Gur RC, Gur RE, Skolnick BE, Obrist WD, Reivich M. Decreases in frontal and parietal lobe regional cerebral blood flow related to habituation. <u>Journal of Cerebral Blood Flow and Metabolism</u>, 1992, 12, 546-553.
- 79. Gur RC, Erwin RJ, Gur RE. Neurobehavioral probes for physiologic neuroimaging studies. <u>Archives of General Psychiatry</u>, 1992, <u>49</u>, 409-414.
- 80. Erwin RJ, Gur RC, Gur RE, Skolnick BE, Mawhinney-Hee M, Smailis J. Facial emotion discrimination: I. Task construction and behavioral findings in normals. Psychiatry Research, 1992, 42, 231-240.
- 81. Gur RC, Erwin RJ, Gur RE, Zwil AS, Heimberg C, Kraemer HC. Facial emotion discrimination: II. Behavioral findings in depression. <u>Psychiatry Research</u>, 1992, <u>42</u>, 241-251.
- 82. Heimberg C, Gur RE, Erwin RJ, Shtasel DL, Gur RC. Facial Emotion Discrimination: III. Behavioral findings in schizophrenia. Psychiatry Research, 1992, 42, 253-265.
- 83. Shtasel DL, Gur RE, Gallacher F, Heimberg C, Cannon T, Gur RC. Phenomenology and functioning in first episode schizophrenia. <u>Schizophrenia Bulletin</u>, 1992, <u>18</u>, 449-462.
- 84. Shtasel DL, Gur RE, Gallacher F, Heimberg C, Gur RC. Gender difference in the clinical expression of schizophrenia. <u>Schizophrenia Research</u>, 1992, <u>7</u>, 225-232.
- 85. Gur RC, Jaggi JL, Ragland JD, Resnick SM, Shtasel D, Muenz L, Gur RE. Effects of memory processing on regional brain activation: Cerebral blood flow in normal subjects. International Journal of Neuroscience, 1993, 72, 31-44.
- 86. Levick SE, Lorig T, Wexler BE, Gur RE, Gur RC, Schwartz GE. Asymmetrical visual deprivation: A technique to differentially influence lateral hemispheric function. <u>Perceptual and Motor Skills</u>, 1993, <u>76</u>, 1363-1382.
- 87. Crawford HJ, Gur RC, Skolnick B, Gur RE, Benson D. Effects of hypnosis on regional cerebral blood flow during ischemic pain with and without suggested hypnotic analgesia. <u>International Journal of Psychophysiology</u>, 1993, <u>15</u>, 181-195.
- 88. Skolnick BE, Gur RC, Stern MB, Hurtig HI. Reliability of regional cerebral blood flow activation to cognitive tasks in elderly normal subjects. <u>Journal of Cerebral Blood Flow and Metabolism</u>, 1993, <u>13</u>, 448-453.
- 89. Gur RC, Ragland JD, Resnick SM, Skolnick BE, Jaggi J, Muenz L, Gur RE. Lateralized increases in cerebral blood flow during performance of verbal and spatial tasks: Relationship with performance level. Brain and Cognition, 1994, 24, 244-258.
- 90. Saykin AJ, Shtasel DL, Gur RE, Kester DB, Mozley LH, Stafiniak P, Gur RC.

- Neuropsychological deficits in neuroleptic naive, first episode schizophrenic patients. Archives of General Psychiatry, 1994, 51, 124-131.
- 91. Schneider F, Gur RC, Gur RE, Muenz L. Standardized Mood Induction with Happy and Sad Facial Expressions. <u>Psychiatry Research</u>, 1994, <u>51</u>, 19-31.
- 92. Gur RE, Mozley PD, Shtasel DL, Cannon TD, Gallacher F, Turetsky B, Grossman R, Gur RC. Clinical subtypes of schizophrenia differ in brain and cerebrospinal fluid volume. American Journal of Psychiatry, 1994, 151, 343-350.
- 93. Gur RC, Skolnick BE, Gur RE. Effects of emotional discrimination tasks on cerebral blood flow: Regional activation and its relation to performance. <u>Brain and Cognition</u>, 1994, <u>25</u>, 271-286.
- 94. Gur RE, Jaggi JL, Shtasel DL, Ragland JD, Gur RC. Cerebral blood flow in schizophrenia: Effects of memory processing on regional activation. <u>Biological Psychiatry</u>, 1994, <u>35</u>, 3-15.
- 95. Mozley PD, Gur RE, Shtasel DL, Resnick SM, Richards J, Kohn M, Grossman R, Herman G, Gur RC. Magnetic resonance imaging in schizophrenia: II. Relationship to clinical measures. <u>Schizophrenia Research</u>, 1994, <u>12</u>, 195-203.
- 96. Cowell PE, Turetsky BT, Gur RC, Grossman RI, Shtasel DL, Gur RE. Sex differences in aging of the human frontal and temporal lobe. <u>The Journal of Neuroscience</u>, 1994, <u>14</u>, 4748-4755.
- 97. Cannon TD, Zorrilla LE, Shtasel DL, Gur RE, Gur RC, Marco EJ, Moberg P, Price RA. Neuropsychological functioning in siblings discordant for schizophrenia and healthy volunteers. <u>Archives of General Psychiatry</u>, 1994, <u>51</u>, 651-661.
- 98. Holdnack JA, Moberg PJ, Arnold SE, Gur RE, Gur RC. MMPI characteristics in adults diagnosed with ADD: A preliminary report. <u>International Journal of Neuroscience</u>, 1994, <u>79</u>, 47-58.
- 99. Schneider F, Gur RC, Jaggi JL, Gur RE. Differential effects of mood on cortical cerebral blood flow: A ¹³³Xenon clearance study. <u>Psychiatry Research</u>, 1994, <u>52</u>, 215-236.
- 100. Resnick SM, Lazar J, Gur RE, Gur RC. The stability of tachistoscopic measures of hemispheric specialization. <u>Neuropsychologia</u>, 1994, <u>32</u>, 1419-1430.
- 101. Gur RC, Mozley LH, Mozley PD, Resnick SM, Karp JS, Alavi A, Arnold SE, Gur RE. Sex differences in regional cerebral glucose metabolism during a resting state. <u>Science</u>, 1995, <u>267</u>, 528-531.
- 102. Kareken DA, Gur RC, Mozley PD, Mozley LH, Saykin AJ, Shtasel DL, Gur RE. Cognitive functioning and neuroanatomic volume measures in schizophrenia. Neuropsychology, 1995, 9, 211-219.
- 103. Ragland JD, Gur RC, Deutsch GK, Gur RE. Reliability and validity of the paired-associate recognition memory test: A test of declarative memory using Wisconsin card sorting

- stimuli. Psychological Assessment, 1995, 7, 25-32.
- 104. Arnold SE, Gur RE, Shapiro RM, Fisher KR, Moberg PJ, Gibney MR, Gur RC, Blackwell P, Trojanowski JQ. Prospective clinicopathologic studies of schizophrenia: accrual and assessment of patients. <u>American Journal of Psychiatry</u>, 1995, <u>152</u>, 731-737.
- 105. Arnold SE, Franz BR, Gur RC, Gur RE, Shapiro RM, Moberg PJ, Trojanowski JQ. Smaller neuron size in schizophrenia in hippocampal subfields that mediate cortical-hippocampal interactions. <u>American Journal of Psychiatry</u>, 1995, <u>152</u>, 738-748.
- 106. Gur RE, Mozley PD, Resnick SM, Mozley LH, Shtasel DL, Gallacher F, Arnold SE, Karp JS, Alavi A, Reivich M, Gur RC. Resting cerebral glucose metabolism and clinical features of schizophrenia. <u>Archives of General Psychiatry</u>, 1995, <u>52</u>, 657-667.
- 107. Kareken DA, Gur RC, Saykin AJ. Reading on the wide range achievement test-revised and parental education as predictors of IQ: Comparison with the Barona formula. <u>Archives of Clinical Neuropsychology</u>, 1995, <u>10</u>, 147-157.
- 108. Holdnack JA, Moberg PJ, Arnold SE, Gur RC, Gur RE. Speed of processing and verbal learning deficits in adults diagnosed with attention deficit disorder. <u>Neuropsychiatry</u>, <u>Neuropsychology and Behavioral Neurology</u>, 1995, <u>8</u>, 282-292.
- 109. Schneider F, Gur RE, Mozley LH, Smith RJ, Mozley PD, Censits DM, Alavi A, Gur RC. Mood effects on limbic blood flow correlate with emotional self-rating. A PET study with oxygen-15 labeled water. <u>Psychiatry Research</u>, 1995, <u>61</u>, 265-283.
- 110. Heimberg C, Gallacher F, Gur RC, Gur RE. Diet and gender moderate clozapine-related weight gain. <u>Human Psychopharmacology</u>, 1995, <u>10</u>, 367-371.
- 111. Saykin AJ, Gur RC, Gur RE, Shtasel DL, Flannery KA, Mozley LH, Malamut BL, Watson B, Mozley PD. Normative neuropsychological test performance: Effects of age, education, gender and ethnicity. <u>Applied Neuropsychology</u>, 1995, <u>2</u>, 79-88.
- 112. Saykin AJ, Stafiniak P, Robinson LJ, Flannery KA, Gur RC, O'Connor MJ, Sperling MR. Language before and after temporal lobectomy: Specificity of acute changes and relation to early risk factors. Epilepsia, 1995, 36, 1071-1077.
- 113. Turetsky BT, Cowell PE, Gur RC, Grossman RI, Shtasel DL, Gur RE. Frontal and temporal lobe brain volumes in schizophrenia: Relationship to symptomatology and clinical subtype. <u>Archives of General Psychiatry</u>, 1995, <u>52</u>, 1061-1070.
- 114. Schneider F, Gur RC, Gur RE, Shtasel DL. Emotional processing in schizophrenia: Neurobehavioral probes in relation to psychopathology. <u>Schizophrenia Research</u>, 1995, <u>17</u>, 67-75.
- 115. Schneider F, Gur RE, Alavi A, Seligman MEP, Mozley LH, Smith RJ, Mozley PD, Gur RC. Cerebral blood flow changes in limbic regions induced by unsolvable anagram tasks. <u>American Journal of Psychiatry</u>, 1996, <u>153</u>, 206-212.

116. Cowell PE, Kostianovsky DJ, Gur RC, Turetsky BI, Gur RE. Sex differences in neuroanatomical and clinical correlations in schizophrenia. <u>American Journal of Psychiatry</u>, 1996, 153, 799-805.

- 117. Ragland JD, Censits DM, Gur RC, Glahn DC, Gallacher F, Gur RE. Assessing declarative memory in schizophrenia using wisconsin card sorting test stimuli: the paired associate recognition test. <u>Psychiatry Research</u>, 1996, <u>60</u>, 135-145.
- 118. Wang GJ, Volkow ND, Fowler JS, Logan J, Gur RC, Netusil N, Hitzemann RJ, Pappas NS. Age associated decrements in dopamine D₂ receptors in thalamus and in temporal insula of human subjects. <u>Life Sciences</u>, 1996, <u>59</u>, 31-35.
- 119. Gur RE, Petty RG, Turetsky BI, Gur RC. Schizophrenia throughout life: Sex differences in severity and profile of symptoms. <u>Schizophrenia Research</u>, 1996, <u>21</u> 1-12.
- 120. Mozley LH, Gur RC, Gur RE, Mozley PD, Alavi A. The Relationship between verbal memory performance and the cerebral distribution of FDG in patients with schizophrenia. <u>Biological Psychiatry</u>, 1996, 40, 443-451.
- 121. Kareken DA, Moberg PJ, Gur RC. Proactive inhibition and semantic organization: Relationship to verbal memory in patients with schizophrenia. <u>Journal of the International Neuropsychological Society</u>, 1996, <u>2</u>, 486-493.
- 122. Szymanski S, Gur RC, Gallacher F, Mozley LH, Gur RE. Vulnerability to tardive dyskinesia development in schizophrenia: An FDG-PET study of cerebral metabolism. Neuropsychompharmacology, 1996, 15, 567-575.
- 123. Mozley PD, Kim H-J, Gur RC, Tatsch K, Muenz LR, McElgin WT, Kung M-P, Mu M, Myers AM, Kung HF. [I-123] IPT SPECT imaging of CNS dopamine transporters: Non-linear effects of normal aging on striatal uptake values. <u>Journal of Nucl Medicine</u>, 1996, <u>37</u>, 1965-1970.
- 124. Volkow ND, Ding YS, Fowler JS, Wang GJ, Logan J, Gatley SJ, Hitzemann R, Smith G, Fields SD, Gur RC. Dopamine transporters decrease with age. <u>Journal of Nuclear Medicine</u>, 1996, <u>37</u>, 554-559.
- 125. Ragland JD, Glahn DC, Gur RC, Censits DM, Smith RJ, Mozley PD, Alavi A, Gur RE. PET regional cerebral blood flow change during working and declarative memory: Relationship with task performance. Neuropsychology, 1997, 11, 222-231.
- 126. Mozley PD, Gur RC, Swanson CL, Turetsky BI, Gur RE, Nienow T, Alavi A. [Tc-99m] ECD SPECT demonstrates that dopaminergic drugs affect cerebral blood flow in healthy human volunteers. Journal of Nuclear Medicine, 1997, 38, 48.
- 127. Finkelstein JRJ, Cannon TD, Gur RE, Gur RC, Moberg P. Attentional Dysfunctions in neuroleptic-naive and neuroleptic-withdrawn schizophrenic patients and their siblings. <u>Journal of Abnormal Psychology</u>, 1997, <u>106</u>, 203-212.
- 128. Gur RC, Ragland JD, Mozley LH, Mozley PD, Smith R, Alavi A, Bilker W, Gur RE.

Lateralized changes in regional cerebral blood flow during performance of verbal and facial recognition tasks: Correlations with performance and "Effort". <u>Brain and Cognition</u>, 1997, <u>33</u>, 388-414.

- 129. Mozley PD, Sadek AM, Alavi A, Gur RC, Muenz LR, Bunow BJ, Kim H-J, Stecker M, Jolles P, Newberg A. Effects of aging on the cerebral distribution of [Tc-99m] HMPAO in healthy humans. <u>European Journal of Nuclear Medicine</u>, 1997, 24, 754-761.
- 130. Censits DM, Ragland JD, Gur RC, Gur RE. Neuropsychological evidence supporting a neurodevelopmental model of schizophrenia: A longitudinal study. <u>Schizophrenia Research</u>, 1997, <u>24</u>, 289-298.
- 131. Moberg PJ, Doty RL, Turetsky BI, Arnold SE, Mahr RN, Gur RC, Bilker W, Gur RE Olfactory Identification deficits in schizophrenia correlation with duration of illness. American Journal of Psychiatry, 1997, 154, 1016-1018.
- 132. Coleman AR, Moberg PJ, Ragland JD, Gur RC. Comparison of the Halstead-Reitan and infrared light beam finger tappers. <u>Assessment</u>, 1997, <u>4</u>, 277-286.
- 133. Glahn DC, Gur RC, Ragland JD, Censits DM, Gur RE. Reliability, performance characteristics, construct validity, and an initial clinical application of a visual object learning test (VOLT). Neuropsychology, 1997, 11, 602-612.
- 134. Gur RC, Ragland JD, Gur RE. Cognitive Changes in Schizophrenia: A Critical Look . <u>International Review of Psychiatry</u>, 1997, <u>9</u>, 449-457.
- 135. Schneider F, Grodd W, Weiss U, Klose U, Mayer KR, Nagele T, Gur RC. Functional MRI reveals left amygdala activation during emotion. Psychiatry Research:Neuroimaging Section, 1997, 76, 75-82.
- 136. Kohler C, Gur RC, Swanson CL, Petty R, Gur RE. Depression in schizophrenia: I. Association with neuropsychological deficits. <u>Biological Psychiatry</u>, 1998, <u>43</u>, 165-172.
- 137. Gur RE, Cowell P, Turetsky BI, Gallacher F, Cannon T, Bilker W, Gur RC. A followup MRI study of schizophrenia: Relationship of neuroanatomic changes with clinical and neurobehavioral measures. <u>Archives of General Psychiatry</u>, 1998, <u>55</u>, 145-152..
- 138. Kohler C, Swanson CL, Gur RC, Harper Mozley L, Gur RE. Depression In Schizophrenia: II. MRI and PET Findings. <u>Biological Psychiatry</u>, 1998, <u>43</u>, 173-180.
- 139. Ragland JD, Gur RC, Glahn DC, Censits DM, Smith RJ, Lazarev MG, Alavi A, Gur RE. Frontotemporal cerebral blood flow change during executive and declarative memory tasks in schizophrenia: a positron emission tomography study. Neuropsychology, 1998, 12, 399-413.
- 140. Swanson CL, Gur RC, Bilker W, Petty RG, Gur RE. Premorbid educational attainment in schizophrenia: association with symptoms, functioning, and neurobehavioral measures. <u>Biological Psychiatry</u>, 1998, <u>44</u>, 739-747.

141. Volkow ND, Gur RC, Wang GJ, Fowler JS, Moberg PJ, Ding YS, Hitzemann R, Smith G, Logan J. Association between decline of brain dopamine activity with age and cognitive and motor impairment in healthy individuals. <u>American Journal of Psychiatry</u>, 1998, <u>155</u>, 344-349.

- 142. Erwin RJ, Turetsky B, Moberg P, Gur RC, Gur RE. P50 abnormalities in schizophrenia: relationship to clinical and neuropsychological indices of attention. <u>Schizophrenia Research</u>, 1998, 33, 157-167.
- 143. Gur RE, Maany V, Mozley D, Swanson C, Bilker W, Gur RC. Subcortical MRI Volumes in Neuroleptic-Naive and Treated Patients With Schizophrenia. <u>American Journal of Psychiatry</u>, 1998, <u>155</u>, 1711-1717.
- 144. Moberg PJ, Doty RL, Turetsky BI, Arnold SE, Mahr RN, Gur RC, Bilker W, Gur RE. Deterioration of olfactory identification abilities in patients with schizophrenia. <u>American</u> Journal of Psychiatry, 1998, 155(10), 1463-1464.
- 145. Coleman AR, Norstrand JA, Moberg PJ, Kohler CG, Gur RC, Gur RE. MMPI-2 characteristics of adults diagnosed with Attention Deficit Disorder. <u>International Journal of Neuroscience</u>, 1998, <u>96</u>, 161-175.
- 146. Volkow ND, Wang GJ, Fowler JS, Ding YS, Gur RC, Gatley JS, Logan J, Moberg PJ, Hitzemann, RJ, Smith G, Pappas N. Parallel Loss of Pre and Postsynaptic Dopamine Markers in Normal Aging. <u>Annals of Neurology</u>, 1998, <u>44</u>, 143-147.
- 147. Cecil KM, Lenkinski RE, Gur RE, Gur, RC. Proton magnetic resonance spectroscopy in the frontal and temporal lobes of neuroleptic naive patients with schizophrenia. Neuropsychoparmacology, 1999, 20, 131-140.
- 148. Ragland JD, Gur RE, Klimas BC, McGrady N, Gur RC. Neuropsychological laterality indices of schizophrenia: Interactions with gender. Schizophrenia Bulletin, 1999, 25, 79-89.
- 149. Gur RC, Turetsky BI, Matsui M, Yan M, Bilker W, Hughett P, Gur RE. Sex differences in brain gray and white matter in healthy young adults. <u>Journal of Neuroscience</u>, 1999, <u>19</u>, 4065-4072.
- 150. Moberg PJ, Agrin, RN, Gur RE, Gur RC, Turetsky BI, Doty RI. Olfactory dysfunction in schizophrenia: A qualitative and quantitative review. Neuropsychopharmacology, 1999, 21, 325-340.
- 151. Gur RE, Turetsky BI, Bilker WB, Gur RC. Reduced gray matter volume in schizophrenia. Archives of General Psychiatry, 1999, 56, 905-911.
- 152. Ragland JD, Coleman AR, Gur RC, Glahn DC, Gur RE. Sex differences in behavior relationships between verbal episodic memory and resting regional cerebral blood flow. Neuropsychologia, 2000, 38, 451-461.
- 153. Glahn DC, Cannon TD, Gur RE, Ragland JD, Gur RC. Working memory constrains abstraction in schizophrenia. <u>Biological Psychiatry</u>, 2000, <u>47</u>, 34-42.

154. Habel U, Gur RC, Mandal MK, Salloum JB, Gur RE, Schneider F. Emotional processing in schizophrenia across cultures: standardized measure of discrimination and experience. Schizophrenia Research, 2000, 42, 57-66.

- 155. Mozley PD, Acton PD, Barraclough ED, Plossl K, Gur RC, Alavi A, Mathur A, Saffer J, Kung HF. Effects of age on dopamine transporters in healthy humans. <u>Journal of Nuclear Medicine</u>, 1999, 40, 1812-1817,
- 156. McBride T, Arnold SE, Gur RC. A comparative volumetric analysis of the prefrontal cortex in human and baboon MRI. Brain, Behavior & Evolution, 1999, 54,159-166.
- 157. Volkow ND, Logan J, Fowler JS, Wang GJ, Gur RC, Wong C, Felder C, Gatley SJ, Ding YS, Hitzemann R, Papass N. Association between age-related decline in brain dopamine activity and impairment in frontal and cingulate metabolism. <u>American Journal of Psychiatry</u>, 2000, <u>157</u>, 75-80.
- 158. Matsui M, Gur RC, Turetsky BI, Yan M, Gur RE. The relation between tendency for psychopathology and reduced frontal brain volume in healthy people. <u>Neuropsychiatry</u>, <u>Neuropsychology</u>, and <u>Behavioral Neurology</u>, 2000, <u>13</u>, 155-162.
- 159. Gur RC, Alsop D, Glahn D, Petty R, Swanson CL, Maldjian JA, Turetsky BI, Detre JA, Gee J, Gur RE. An fMRI study of sex differences in regional activation to a verbal and a spatial task. <u>Brain and Language</u>, 2000, <u>74</u>, 157-170.
- 160. Kohler CG, Bilker W, Hagendoorn M, Gur RE, Gur RC. Emotion recognition deficit in schizophrenia: Association with symptomatology and cognition. <u>Biological Psychiatry</u>, 2000, <u>48</u>, 127-136.
- 161. Ragland JD, Gur RC, Lazarev, MG, Smith RJ, Schroeder L, Raz J, Turetsky, BI, Alavi A, Gur RE. Hemispheric activation of anterior and inferior prefrontal cortex during verbal encoding and recognition. NeuroImage, 2000, 11, 624-633.
- 162. Gur RE, Cowell PE, Latshaw A, Turetsky BI, Gorssman RI, Arnold SE, Bilker WB, Gur RC. Reduced dorsal and orbital prefrontal gray matter volumes in schizophrenia. <u>Archives of General Psychiatry</u>, 2000, <u>57</u>, 761-768.
- 163. Gur RE, Turetsky BI, Cowell PE, Finkelman C, Maany V, Grossman RI, Arnold SE, Bilker WB, Gur RC. Temporolimbic volume reductions in schizophrenia. <u>Archives of General Psychiatry</u>, 2000, 57, 769-775.
- 164. Kohler CG, Ances BM, Coleman AR, Ragland JD, Lazarev M, Gur RC. Marchiafava-Bignami disease: literature review and case report. Neuropsychiatry, Neuropsychology, & Behavioral Neurology. 2000, 13, 67-76.
- 165. Matsuzawa J, Matsui M, Konishi T, Noguchi N, Gur RC, Bilker W, Miyawaki T. Agerelated volumetric changes of brain gray and white matter in healthy infants and children. Cerebral Cortex. 2001, 11, 335-342.

166. Kurtz, M.M., Moberg, P.J., Harper Mozley, L., Swanson, C.S., Gur, R. C., & Gur, R.E. Effectiveness of an attention and memory training program on neuropsychological deficits in schizophrenia. <u>Neurorehabilitation and Neural Repair</u>, 2001, <u>15</u>, 23-28.

- 167. Ragland JD, Gur RC, Raz J, Schroeder L, Smith RJ, Alavi A, Gur RE. Effect of schizophrenia on frontotemporal activity during word encoding and recognition: A PET cerebral blood flow study. <u>American Journal of Psychiatry</u>, 2001, <u>158</u>, 1114-1125.
- 168. Kurtz, M.M., Ragland, J.D., Bilker, W.B., Gur, R.C., & Gur R.E. Comparison of two forms of the Continuous Performance Test, with and without working memory demands, in healthy controls and patients with schizophrenia. <u>Schizophrenia Research</u>, 2001, <u>48</u>, 307-316.
- 169. Mozley LH, Gur RC, Mozley PD, & Gur RE. Striatal dopamine transporters and cognitive functioning in healthy men and women. <u>American Journal of Psychiatry</u>, 2001, <u>158</u>,1492-1499
- 170. Silver, H, Shlomo, N, Turner, T, Gur, RC. Perception of happy and sad facial expressions in chronic schizophrenia: Evidence for two evaluative systems. <u>Schizophrenia Research</u>, 2002, 55, 171-177,
- 171. Gur RC, Ragland JD, Moberg PJ, Turner TH, Bilker WB, Kohler C, Siegel SJ, Gur RE. Computerized Neurocognitive Scanning: I. Methodology and validation in healthy people. Neuropsychopharmacology, 2001, 25, 766-776.
- 172. Gur RC, Ragland JD, Moberg PJ, Bilker WB, Kohler C, Siegel SJ, Gur RE. Computerized Neurocognitive Scanning II: The Profile of Schizophrenia. <u>Neuropsychopharmacology</u>, 2001, <u>25</u>, 777-788,
- 173. Hill SK, Ragland JD, Gur RC, Gur RE. Neuropsychological differences among empirically derived clinical subtypes of schizophrenia. <u>Neuropsychology</u>, 2001, <u>15</u>, 492-501.
- 174. Moelter ST, Hill SK, Ragland JD, Lunardelli A, Gur, RC, Gur RE, Moberg PJ. Controlled and automatic processing during animal word list generation in schizophrenia. Neuropsychology, 2001, 15, 502-509.
- 175. Kurtz MM, Moberg PJ, Gur RC, Gur RE. Approaches to cognitive remediation of neuropsychological deficits in schizophrenia: a review and meta-analysis. Neuropsychology Review. 2001, 11, 197-210.
- 176. Gur RC, Gunning-Dixon FM, Turetsky BI, Bilker WB, Gur RE. Brain Region and sex differences in age association with brain volume: A quantitative MRI study of healthy young adults. Am J Geriatric Psychiatry, 2002, 10,72-80.
- 177. Ragland JD, Turetsky BI, Gur RC, Gunning-Dixon F, Turner T, Schroeder L, Chan R, Gur RE. Working memory for complex figures: an fMRI comparison of letter and fractal n-back tasks. Neuropsychology, 2002, 16, 370-379.
- 178. Langleben DD, Schroeder L, Maldjian JA, Gur RC, McDonald S, Ragland JD,

O'Brien CP, Childress AR. Brain activity during simulated deception: An event-related functional magnetic resonance study. <u>NeuroImage</u>, 2002, 15, 727-732.

- 179. Gur RC, Sara R, Hagendoorn M, Maron O, Hughett P, Turner T, Bajcsy R, Gur RE. A method for obtaining 3-dimensional facial expressions and its standardization for use in neurocognitive studies. <u>Journal of Neuroscience Methods</u>, 2002, <u>115</u>, 137-143.
- 180. Gur RC, Schroeder L, Turner T, McGrath C, Chan RM, Turetsky BI, Alsop D, Maldjian J, Gur RE. Brain activation during facial emotion processing. NeuroImage, 2002, 16, 651-662.
- 181.Gur RC, Gunning-Dixon F, Bilker WB, Gur RE. Sex Differences in temporo-limbic and frontal brain volumes of healthy adults. <u>Cerebral Cortex</u>, 2002, <u>12</u>, 998-1003.
- 182.Gur RE, Gur RC. Gender differences in aging: Cognition, emotions and neuroimaging studies. <u>Dialogues in Clinical Neuroscience</u>. 2002, <u>4</u>,197-207.
- 183.Goldstein RZ, Volkow ND, Chang L, Wang GJ, Fowler JS, Depue RA, Gur RC. The orbitofrontal cortex in methamphetamine addiction: Involvement in fear. NeuroReport, 2002, 13, 2253-2257.
- 184.Hill SK, Ragland JD, Gur RC, Gur RE. Neuropsychological profiles delineate distinct profiles of schizophrenia, an interaction between memory and executive function, and uneven distributions of clinical subtypes. <u>Journal of Clinical and Experimental Neuropsychology</u>. 2002, 24, 765-780.
- 185.Turetsky BI, Moberg PJ, Mozley LH, Moelter ST, Agrin R, Gur RC, Gur RE. Memory-delineated subtypes of schizophrenia: Relationship to clinical, neuroanatomical and physiological measures. Neuropsychology, 2002, 16, 481-490.
- 186.Gur RE, McGrath C, Chan RM, Schroeder L, Turner T, Turetsky BI, Kohler C, Alsop D, Maldjian J, Ragland JD, Gur RC. An fMRI study of facial emotion processing in schizophrenia. <u>Am Journal of Psychiatry</u>, 2002, <u>159</u>, 1992-1999.
- 187.Rosen AC, Gur RC. Ethical considerations for neuropsychologists as functional magnetic imagers. <u>Brain and Cognition</u>. 2002, <u>50</u>, 469-481.
- 188.Gunning-Dixon FM, Gur RC, Perkins AC, Schroeder L, Turner T, Turetsky BI, Chan RM, Loughead JW, Alsop DC, Maldjian J, Gur RE. Age-related differences in brain activation during emotional face processing. Neurobiology of Aging. 2003, 24, 285-95.
- 189.Kryspin-Exner I, Gur RC, Hoheisel B, Klein M, Six N. Neurobehavioral Probes: Adaptierung und Erweiterung von Verfahren zur computergestützen neuropsychologischen Diagnostik. Verhaltenstherapie und Verhaltensmedizin, 2003, 24, 27-51.
- 190.Kohler CG, Turner TT, Bilker WB, Brensinger C, Siegel SJ, Kanes, SJ, Gur RE, Gur RC. Facial emotion recognition in schizophrenia: Intensity effects and error pattern. <u>American Journal of Psychiatry</u>, 2003, <u>160</u>, 1768-1774.

191. Silver H, Feldman P, Bilker WB, Gur RC. Working memory deficit as a core neuropsychological dysfunction in schizophrenia. <u>American Journal of Psychiatry</u>, 2003, <u>160</u>, 1809-1816.

- 192.Indersmitten T, Gur RC. Emotion processing in chimeric faces: hemispheric asymmetries in expression and recognition of emotions. <u>The Journal of Neuroscience</u>. 2003, <u>23</u>, 3820-3825.
- 193.Bilker WB, Brensinger C, Kurtz MM, Kohler C, Gur RC, Siegel SJ, Gur RE. Development of an abbreviated schizophrenia quality of life scale using a new method. Neuropsychopharmacology. 2003, 28, 773-777.
- 194. Windischberger C, Barth M, Lamm C, Schroeder L, Bauer H, Gur RC, Moser E. Fuzzy cluster analysis of high-field functional MRI data. <u>Artificial Intelligence in Medicine</u>. 2003, <u>29</u>, 203-223.
- 195. Ragland JD, Moelter ST, McGrath C, Hill SK, Gur RE, Bilker WB, Siegel SJ, Gur RC. Levels-of-processing effect on word recognition in schizophrenia. <u>Biological Psychiatry</u>. 2003, <u>54</u>, 1154-1161.
- 196. Dubb A, Gur RC, Avants B, Gee J. Characterization of sexual dimorphism in the human corpus callosum. Neuroimage. 2003 20:512-519.
- 197.Gur RE, Kohler C, Ragland JD, Siegel SJ, Bilker WB, Loughead J, Phend N, Gur RC. Neurocognitive performance and clinical changes in olanzapine-treated patients with schizophrenia. Neuropsychopharmacology. 2003 28:2029-2036.
- 198. Gelber EI, Kohler CG, Bilker WB, Gur RC, Brensinger C, Siegel SJ, Gur RE. Symptom and demographic profiles in first-episode schizophrenia. Schizophrenia Research. 2004, 67, 185-194.
- 199.Kurtz MM, Ragland JD, Moberg PJ, Gur RC: The Penn Conditional Exclusion Test: A New Measure of Executive-function with Alternate Forms for Repeat Administration. Archives of Clinical Neuropsychology. 2004, 19, 191-201.
- 200.Kohler CG, Turner TH, Gur RE, Gur RC. Recognition of facial emotions in neuropsychiatric disorders. <u>CNS Spectrum</u>. 2004, <u>9</u>, 267-274.
- 201. Elliott MA, Gualtieri EE, Hulvershorn J, Ragland JD, Gur R. The effects of geometric distortion correction on motion realignment in fMRI. <u>Academic Radiology</u>. 2004, <u>11</u>, 1005-1010.
- 202. Kurtz MM, Moberg PJ, Gur RC, Gur RE. Results from randomized, controlled trials of the effects of cognitive remediation on neurocognitive deficits in patients with schizophrenia. <u>Psychol Med.</u> 2004, 34, 569-570.
- 203. Lowery N, Ragland JD, Gur RC, Gur RE, Moberg PJ. Normative data for the symbol cancellation test in young healthy adults. <u>Applied Neuropsychology</u>. 2004, <u>11</u>, 218-221.
- 204. Kohler CG, Turner T, Stolar NM, Bilker WB, Brensinger CM, Gur RE, Gur RC.

- Differences in Facial Expressions of Four Universal Emotions. <u>Psychiatry Research</u>, 2004, 128, 235-244.
- 205.Gur RE, Kohler CG, Turetsky BI, Siegel SJ, Kanes SJ, Bilker WB, Brennan AR, Gur RC. A sexually dimorphic ratio of orbitofrontal to amygdala volume is altered in schizophrenia. <u>Biological Psychiatry</u>, 2004, <u>55</u>, 512-517.
- 206. Keefe RSE, Seidman LJ, Christensen BK, Hamer RM, Sharma T, Sitskoorn MM, Lewine RRJ, Yurgelun-Todd DA, Gur RC, Tohen M, Tollefson GD, Sanger TM, Lieberman JA. Comparative effect of atypical and conventional antipsychotic drugs on neurocognition in first-episode psychosis: A randomized double-blind trial of olanzapine versus haloperidol. <u>American Journal</u> of Psychiatry, 2004, 161, 985-995.
- 207. Ragland JD, Gur RC, Valdez J, Turetsky BI, Elliott M, Kohler CG, Siegel SJ, Kanes SJ, Gur RE. Event-related fMRI of frontotemporal activity during word encoding and recognition in schizophrenia. American Journal of Psychiatry, 2004, 161,1004-1015.
- 208. Irani F, Dankert M, Brensinger C, Bilker WB, Nair SR, Kohler CG, Kanes SJ, Turetsky BI, Moberg PJ, Ragland JD, Gur RC, Gur RE, Siegel SJ. Patient attitudes towards surgically-implantable, long-term delivery of psychiatric medicine, <u>Neuropsychopharmacology</u>. 2004, <u>29</u>, 960-968.
- 209. Sachs G, Steger-Wuchse D, Kryspin-Exner I, Gur RC, Katschnig H. Facial recognition deficits and cognition in schizophrenia. <u>Schizophrenia Research</u>. 2004, <u>68</u>, 27-35.
- 210. Weiser M, Reichenberg A, Rabinowitz J, Knobler HY, Lubin G, Yazvitzky R, Nahon D, Gur RC, Davidson M. Cognitive performance of male adolescents is lower than controls across psychiatric disorders: A population-based study. <u>Acta Psychiatrica Scandinavica</u>. 2004, <u>110</u>, 471-475.
- 211. Bilker WB, Brensinger C, Gur RC. A two factor ANOVA-like test for correlated correlations: CORANOVA. <u>Multivariate Behavioral Research.</u> 2004, <u>39</u>, 565-594.
- 212. Verma R, Davatzikos C, Loughead J, Indersmitten T, Hu R, Kohler CG, Gur RE, Gur RC. Quantification of facial expressions using high dimensional shape transformations. <u>Journal of Neuroscience Methods</u>. 2005, 141, 61-73.
- 213.Goldstein RZ, Alia-Klein N, Leskovjan AC, Fowler JS, Wang G, Gur RC, Hitzemann R, Volkow ND. Anger and depression in cocaine addiction: Association with the orbitofrontal cortex. Psychiatry Research: Neuroimaging. 2005, 138, 13–22.
- 214.Dubb A, Xie Z, Gur RC, Gur RE, Gee J. Characterization of brain plasticity in schizophrenia using template deformation. <u>Acad Radiology</u>, 2005, <u>12</u>, 3-9.
- 215. Nucifora PG, Verma R, Melhem ER, Gur RE, Gur RC. Leftward asymmetry in relative fiber density of the arcuate fasciculus. <u>Neuroreport</u>, 2005, <u>16</u>, 791-794.
- 216. Yushkevich P, Dubb A, Xie Z, Gur RE, Gur RC, Gee J. Regional structural characterization of the brain of schizophrenia patients. <u>Acad Radiol.</u>, 2005, <u>12</u>,1250-1261.

217. Calkins ME, Gur RC, Ragland JD, Gur RE. Face recognition memory deficits and visual object memory performance in patients with schizophrenia and their relatives. <u>Am J Psychiatry</u>. 2005,162,1963-1966.

- 218. Ragland JD, Gur RC, Valdez JN, Loughead J, Elliott M, Kohler CG, Kanes SJ, Siegel SJ, Moelter ST, Gur RE. Levels-of-processing effect on frontotemporal function in schizophrenia during word encoding and recognition. American Journal of Psychiatry. 2005, 162, 1840-1848.
- 219. Kurtz MM, Moberg PJ, Ragland JD, Gur RC, Gur RE. Symptoms versus neurocognitive test performance as predictors of psychosocial status in schizophrenia. <u>Schizophrenia Bulletin</u>. 2005, <u>31</u>,167-174.
- 220. Gur RC. Brain maturation and its relevance to understanding criminal culpability of juveniles. <u>Current Psychiatry Reports</u>. 2005, <u>7</u>, 292-296.
- 221. Moelter ST, Hill SK, Hughett P, Gur RC, Gur RE, Ragland JD. Organization of semantic category exemplars in schizophrenia. <u>Schizophr Res</u>. 2005, <u>15</u>, 209-217.
- 222. Platek SM, Loughead JW, Gur RC, Busch S, Ruparel K, Phend N, Panyavin IS, Langleben DD. Neural substrates for functionally discriminating self-face from personally familiar faces, <u>Human Brain Mapping</u>. 2005 Jul 20; [Epub ahead of print]
- 223. Williams LM, Grieve SM, Whitford TJ, Clark RC, Gur RC, Goldberg E, Flor-Hentry P, Peduto AS, Gordon E. Neural synchrony and grey matter variations in human males and females: An integration of 40hz gamma synchrony and neuroimaging measures. <u>Journal of Integrative Neuroscience</u>, 2005, 4, 77-93.
- 224. Davatzikos C, Shen D, Gur RC, Wu X, Liu D, Fan Y, Hughett P, Turetsky BI, Gur RE. Whole brain morphometric study of schizophrenia reveals a spatially complex set of focal abnormalities. Archives of General Psychiatry, 2005, 62, 1218-1227.
- 225. Langleben DD, Loughead JW, Bilker WB, Ruparel K, Childress AR, Busch S, Gur RC. Telling truth from lie in individual subjects with fast event-related fMRI. <u>Human Brain Mapping</u>, 2005, 26, 262-272.
- 226. Davatzikos C, Ruparel K, Fan Y, Shen DG, Acharyya M, Loughead JW, Gur RC, Langleben DD, Classifying spatial patterns of brain activity using machine learning methods: application to lie detection. NeuroImage. 2005, 15, 663-668.
- 227. Schneider F, Gur RC, Koch K, Backes V, Amunts K, Shah NJ, Bilker W, Gur RE, Habel U. Impairment in the specificity of emotion processing in schizophrenia. <u>American Journal of Psychiatry</u>. 2006, 163, 442-447.
- 228. Siegel SJ, Irani F, Brensinger CM, Kohler CG, Bilker WB, Ragland JD, Kanes SJ, Gur, RC, Gur RE. Prognostic variables at intake and long-term level of function in schizophrenia. American Journal of Psychiatry, 2006, 163, 1-9.
- 229. Ragland JD, McCarthy E, Bilker WB, Brensinger CM, Valdez J, Kohler C, Gur RE, Gur RC.

Levels-of-processing effect on internal source monitoring in schizophrenia. <u>Psychological</u> Medicine. 2006, 36, 641-648.

- 230. Gur RE, Kohler CG, Ragland JD, Siegel SJ, Lesko K, Bilker WB, Gur RC. Flat affect in schizophrenia: Relation to emotion processing and neurocognitive measures. Schizophrenia Bulletin, 2006, 32, 279-287.
- 231. Silver H, Goodman C, Bilker W, Gur RC, Isakov V, Knoll G, Feldman P. Impaired error monitoring contributes to face recognition deficit in schizophrenia patients. <u>Schizophrenia Reseach</u>. 2006, <u>85</u>, 151-161.
- 232. Dickinson D, Ragland JD, Calkins ME, Gold JM, Gur RC. A comparison of cognitive structure in schizophrenia patients and healthy controls using confirmatory factor analysis. <u>Schizophrenia Reseach</u>. 2006, <u>85</u>, 20-29.
- 233. Irani F, Platek SM, Panyavin IS, Calkins ME, Kohler C, Siegel SJ, Schachter M, Gur RE, Gur RC. Self-face recognition and theory of mind in patients with schizophrenia and first-degree relatives. Schizophrenia Reseach. 2006, 88, 151-160.
- 234. Sanders RD, Joo YH, Almasy L, Wood J, Keshavan MS, Pogue-Geile MF, Gur RC, Gur RE, Nimgaonkar VL. Are neurologic examination abnormalities heritable? A preliminary study. <u>Schizophrenia Reseach</u>. 2006, <u>86</u>, 172-180.
- 235. Moberg PJ, Arnold SE, Doty RL, Gur RE, Balderston CC, Roalf DR, Gur RC, Kohler CG, Kanes SJ, Seigel SJ, Turetsky BI. Olfactory functioning in schizophrenia: Relationship to clinical, neuropsychological, and volumetric MRI measures. <u>Journal of Clinical and Experimental Neuropsychology</u>, 2006, 28, 1444-1461.
- 236. Weiss EM, Kohler CG, Brensinger CM, Bilker WB, Loughead J, Delazer M, Nolan KA. Gender differences in facial emotion recognition in persons with chronic schizophrenia. Eur Psychiatry. 2007, 22, 116-122.
- 237. Aliyu MH, Calkins ME, Swanson CL Jr, Lyons PD, Savage RM, May R, Wiener H, McLeod-Bryant S, Nimgaonkar VL, Ragland JD, Gur RE, Gur RC, Bradford LD, Edwards N, Kwentus J, McEvoy JP, Santos AB, McCleod-Bryant S, Tennison C, Go RC, Allen TB; PAARTNERS Study Group. Project among African-Americans to explore risks for schizophrenia (PAARTNERS): recruitment and assessment methods. Schizophr Res. 2006; 87:32-44. Erratum in: Schizophr Res. 2007; 90:369.
- 238. Kohler CG, Barrett FS, Gur RC, Turetsky BI, Moberg PJ. Association between facial emotion recognition and odor identification in schizophrenia. <u>J Neuropsychiatry Clin Neuroscience</u>. 2007, 19, 128-131.
- 239. Gur RE, Turetsky BI, Loughead J, Snyder W, Kohler C, Elliott M, Pratiwadi R, Ragland JD, Bilker WB, Siegel SJ, Kanes SJ, Arnold SE, Gur RC. Visual attention circuitry in schizophrenia investigated with oddball event-related functional magnetic resonance imaging. <u>American Journal of Psychiatry</u>. 2007, 164, 442-449.
- 240. Moser E, Derntl B, Robinson S, Fink B, Gur RC, Grammer K. Amygdala activation at 3T in

- response to human and avatar facial expressions of emotions. <u>Journal of Neuroscience Methods</u>. 2007, 161, 126-133.
- 241. Gur RC, Turetsky BI, Loughead J, Waxman J, Snyder W, Ragland JD, Elliot M, Bilker WB, Arnold SE, Gur RE. Hemodynamic responses in neural circuitries for detection of visual target and novelty: An event-related fMRI study. <u>Human Brain Mapping</u>. 2007, <u>28</u>, 263-274.
- 242. Wolf DH, Gur RC, Valdez JN, Loughead J, Elliott MA, Gur RE, Ragland JD. Alterations of fronto-temporal connectivity during word encoding in schizophrenia. <u>Psychiatry Reseach</u>. 2007, 15, 221-232.
- 243. Gur RE, Calkins M, Gur RC, Horan W, Nuechterlein K, Seidman L, Stone W. The Consortium on the genetics of schizophrenia (COGS): Neurocognitive Endophenotypes. <u>Schizophrenia Bulletin</u>, 2007, <u>33</u>, 49-68.
- 244. Ragland JD, Valdez JN, Loughead J, Gur RC, Gur RE. Functional magnetic resonance imaging of internal source monitoring in schizophrenia: Recognition with and without recollection. Schizophrenia Research. 2006; 87: 160-171.
- 245. Weiss EM, Kohler CG, Nolan KA, Czobor P, Volavka J, Platt MM, Brensinger C, Loughead J, Delazer M, Gur RE, Gur RC. The Relationship between history of violent and criminal behavior and recognition of facial expression of emotions in men with schizophrenia and schizoaffective disorder. Journal of Aggressive Behavior, 2006, 32, 187-194.
- 246. Alvino C, Kohler CG, Barrett F, Gur RE, Gur RC, Verma R. Computerized measurement of facial expression of emotions in schizophrenia. J Neurosci Methods. 2007; <u>163</u>: 350-361.
- 247. Habel U, Windischberger C, Derntl B, Robinson S, Kryspin-Exner I, Gur RC, Moser E. Amygdala activation and facial expressions: Explicit emotion discrimination versus implicit emotion processing. Neuropsychologia. 2007, 45, 2369-2377.
- 248. Gur RE, Nimgaonkar VL, Almasy L, Calkins ME, Ragland JD, Pogue-Guile MF, Kanes SJ, Blangero J, Gur RC. Neurocognitive Endophenotypes in a Multiplex Multigenerational Family Study of Schizophrenia, <u>American Journal of Psychiatry</u>, 2007, <u>164</u>, 813-819.
- 249. Pinkham AE, Gur RE, Gur RC. Affect recognition deficits in schizophrenia: neural substrates and psychopharmacological implications. <u>Expert Rev Neurother</u>. 2007, <u>7</u>, 807-816.
- 250. Turetsky BI, Kohler CG, Indersmitten T, Bhati MT, Charbonnier D, Gur RC. Facial emotion recognition in schizophrenia: When and why does it go awry? <u>Schizophr Res</u>. 2007, <u>94</u>, 253-263.
- 251. Fan Y, Gur RE, Gur RC, Wu X, Shen D, Calkins ME, Davatzikos C. Unaffected Family Members and Schizophrenia Patients Share Brain Structure Patterns: A High-Dimensional Pattern Classification Study. <u>Biol Psychiatry</u>. 2007 Jun 5; [Epub ahead of print]
- 252. Calkins ME, Dobie DJ, Cadenhead KS, Olincy A, Freedman R, Green MF, Greenwood TA, Gur RE, Gur RC, Light GA, Mintz J, Nuechterlein KH, Radant AD, Schork NJ, Seidman LJ, Siever LJ, Silverman JM, Stone WS, Swerdlow NR, Tsuang DW, Tsuang MT, Turetsky BI,

Braff DL. The Consortium on the Genetics of Endophenotypes in Schizophrenia: model recruitment, assessment, and endophenotyping methods for a multisite collaboration. <u>Schizophr</u> Bull. 2007; 33: 33-48.

- 253. Halpern DF, Benbow CP, Geary DC, Gur RC, Hyde JS, and Gernsbacher MA. The science of sex differences in science and mathematics. <u>Psychological Science in the Public Interest</u>, 2007; 8: 1-51.
- 254. Kohler CG, Martin EA, Kujawski E, Bilker W, Gur RE, Gur RC. No effect of donepezil on neurocognition and social cognition in young persons with stable schizophrenia. Cognit Neuropsychiatry. 2007; 12: 412-421.
- 255. Wang J, Korczykowski M, Rao H, Fan Y, Pluta J, Gur RC, McEwen BS, Detre JA. Gender Difference in Neural Response to Psychological Stress. <u>Soc Cogn Affect Neurosci</u>. 2007, <u>24</u>, 227-239.
- 256. Gur RE, Loughead J, Kohler CG, Elliott MA, Lesko K, Ruparel K, Wolf DH, Bilker WB, Gur RC. Limbic activation associated with misidentification of fearful faces and flat affect in schizophrenia. Arch Gen Psychiatry. 2007, 64, 1356-1366.
- 257. Silver H, Goodman C, Bilker WB, Knoll G, Gur RC, Povar G. Suboptimal processing strategy and working-memory impairments predict abstraction deficit in schizophrenia. <u>J Clin Exp Neuropsychol</u>. 2007, <u>29</u>, 823-830.
- 258. Greenwood TA, Braff DL, Light GA, Cadenhead KS, Calkins ME, Dobie DJ, Freedman R, Green MF, Gur RE, Gur RC, Mintz J, Nuechterlein KH, Olincy A, Radant AD, Seidman LJ, Siever LJ, Silverman JM, Stone WS, Swerdlow NR, Tsuang DW, Tsuang MT, Turetsky BI, Schork NJ. Initial heritability analyses of endophenotypic measures for schizophrenia: the consortium on the genetics of schizophrenia. Arch Gen Psychiatry. 2007, 64, 1242-1250.
- 259. Ragland JD, Moelter ST, Bhati MT, Valdez JN, Kohler CG, Siegel SJ, Gur RC, Gur RE. Effect of retrieval effort and switching demand on fMRI activation during semantic word generation in schizophrenia. <u>Schizophr Res.</u> 2008, <u>99</u>, 312-23.
- 260. Wang P, Barrett F, Martin E, Milonova M, Gur RE, Gur RC, Kohler C, Verma R. Automated video-based facial expression analysis of neuropsychiatric disorders. <u>J Neurosci Methods</u>. 2008, <u>168</u>, 224-238.
- 261. Loughead J, Gur RC, Elliott M, Gur RE. Neural circuitry for accurate identification of facial emotions. <u>Brain Res.</u> 2008, <u>1194</u>, 37-44.
- 262. Hakun JG, Seelig D, Ruparel K, Loughead JW, Busch E, Gur RC, Langleben DD. fMRI investigation of the cognitive structure of the Concealed Information Test. Neurocase. 2008; 14: 59-67.
- 263. Leitman DI, Loughead J, Wolf DH, Ruparel K, Kohler CG, Elliott MA, Bilker WB, Gur RE, Gur RC. Abnormal Superior Temporal Connectivity During Fear Perception in Schizophrenia. Schizophr Bull. 2008, 34: 673-678.

264. Green MF, Penn DL, Bentall R, Carpenter WT, Gaebel W, Gur RC, Kring AM, Park S, Silverstein SM, Heinssen R. Social Cognition in Schizophrenia: An NIMH Workshop on Definitions, Assessment, and Research Opportunities. <u>Schizophr Bull</u>. 2008 Jan 8; [Epub ahead of print]

- 265. Hakun JG, Ruparel K, Seelig D, Busch E, Loughead JW, Gur RC, Langleben DD. Towards clinical trials of lie detection with fMRI. Soc Neurosci. 2008, 12:1-10.
- 266. Ray R, Loughead J, Wang Z, Detre J, Yang E, Gur R, Lerman C. Neuroimaging, genetics and the treatment of nicotine addiction. Behav Brain Res. 2008 Jun 5. [Epub ahead of print]
- 267. Gur RC, Ragland JD, Reivich M, Greenberg JH, Alavi A, Gur RE. Regional Differences in the Coupling between Resting Cerebral Blood Flow and Metabolism may Indicate Action Preparedness as a Default State. <u>Cereb Cortex</u>. 2008 Jun 4. [Epub ahead of print]
- 268. Dickinson D, Ragland JD, Gold JM, Gur RC. General and specific cognitive deficits in schizophrenia: Goliath defeats David? <u>Biological Psychiatry</u>, 2008 May 8. [Epub ahead of print].
- 269. Almasy L, Gur RC, Haack K, Cole SA, Calkins ME, Peralta JM, Hare E, Prasad K, Pogue-Geile MF, Nimgaonkar V, Gur RE. A Genome Screen for Quantitative Trait Loci Influencing Schizophrenia and Neurocognitive Phenotypes. Am J Psychiatry. 2008 Jul 15. [Epub ahead of print]
- 270. Horan WP, Braff DL, Nuechterlein KH, Sugar CA, Cadenhead KS, Calkins ME, Dobie DJ, Freedman R, Greenwood TA, Gur RE, Gur RC, Light GA, Mintz J, Olincy A, Radant AD, Schork NJ, Seidman LJ, Siever LJ, Silverman JM, Stone WS, Swerdlow NR, Tsuang DW, Tsuang MT, Turetsky BI, Green MF. Verbal working memory impairments in individuals with schizophrenia and their first-degree relatives: Findings from the Consortium on the Genetics of Schizophrenia. Schizophr Res. 2008, 103:218-228.
- 271. Pinkham AE, Sasson NJ, Calkins ME, Richard J, Hughett P, Gur RE, Gur RC. The other-race effect in face processing among African American and Caucasian individuals with schizophrenia. Am J Psychiatry. 2008, 165:639-645.
- 272. Kohler CG, Loughead J, Ruparel K, Indersmitten T, Barrett FS, Gur RE, Gur RC. Brain activation during eye gaze discrimination in stable schizophrenia. Schizophr Res. 2008, 99:286-293.
- 273. Carter CS, Barch DM, Gur RC, Gur RE, Pinkham A, Ochsner K. CNTRICS Final Task Selection: Social Cognitive and Affective Neuroscience-Based Measures. Schizophr Bull. 2008 Nov 14. [Epub ahead of print] PMID: 19011231
- 274. Russ JB, Gur RC, Bilker WB. Validation of affective and neutral sentence content for prosodic testing. Behav Res Methods. 2008 Nov;40(4):935-9. PMID: 19001384
- 275. Dyck M, Winbeck M, Leiberg S, Chen Y, Gur RC, Mathiak K. Recognition profile of emotions in natural and virtual faces. PLoS ONE. 2008;3(11):e3628. Epub 2008 Nov 5. PMID: 18985152

276. Talkowski ME, McClain L, Allen T, Bradford LD, Calkins M, Edwards N, Georgieva L, Go R, Gur RE, Gur RC, Kirov G, Chowdari K, Kwentus J, Lyons P, Mansour H, McEvoy J, O'Donovan MC, O'Jile J, Owen MJ, Santos A, Savage R, Toncheva D, Vockley G, Wood J, Devlin B, Nimgaonkar VL. Convergent patterns of association between phenylalanine hydroxylase variants and schizophrenia in four independent samples. Am J Med Genet B Neuropsychiatr Genet. 2008 Oct 20. [Epub ahead of print] PMID: 18937293

- 277. Patterson F, Jepson C, Strasser AA, Loughead J, Perkins KA, Gur RC, Frey JM, Siegel S, Lerman C. Varenicline Improves Mood and Cognition During Smoking Abstinence. Biol Psychiatry. 2008 Oct 6. [Epub ahead of print] PMID: 18842256
- 278. Wild J, Gur RC. Verbal memory and treatment response in post-traumatic stress disorder. Br J Psychiatry. 2008 Sep;193(3):254-5. PMID: 18757989
- 279. Mathersul D, Palmer DM, Gur RC, Gur RE, Cooper N, Gordon E, Williams LM. Explicit identification and implicit recognition of facial emotions: II. Core domains and relationships with general cognition. J Clin Exp Neuropsychol. 2008 Aug 19:1-14. [Epub ahead of print] PMID: 18720178
- 280. Williams LM, Mathersul D, Palmer DM, Gur RC, Gur RE, Gordon E. Explicit identification and implicit recognition of facial emotions: I. Age effects in males and females across 10 decades. J Clin Exp Neuropsychol. 2008 Aug 19:1-21. [Epub ahead of print] PMID: 18720177
- 281. Turetsky BI, Greenwood TA, Olincy A, Radant AD, Braff DL, Cadenhead KS, Dobie DJ, Freedman R, Green MF, Gur RE, Gur RC, Light GA, Mintz J, Nuechterlein KH, Schork NJ, Seidman LJ, Siever LJ, Silverman JM, Stone WS, Swerdlow NR, Tsuang DW, Tsuang MT, Calkins ME. Abnormal auditory n100 amplitude: a heritable endophenotype in first-degree relatives of schizophrenia probands. Biol Psychiatry. 2008 Dec 15;64(12):1051-9. Epub 2008 Aug 13. PMID: 18701089
- 282. Derntl B, Windischberger C, Robinson S, Lamplmayr E, Kryspin-Exner I, Gur RC, Moser E, Habel U. Facial emotion recognition and amygdala activation are associated with menstrual cycle phase. Psychoneuroendocrinology. 2008 Sep;33(8):1031-40. PMID: 18675521

Contributions to peer-reviewed clinical research publications, participation cited but not by authorship:

None.

Research Publications, non-peer reviewed: None.

Abstracts: (Excluding abstracts subsequently published as full-length papers; Past 3 years only)

- 1. Gur RE, Almasy L, Nimgaonkar V, Gur RC, Turetsky BI. Endophenotypic measures in disorders of complex behavior. Society of Biological Psychiatry, Philadelphia, Pennsylvania, 2002.
- 2. Kurtz M, Moberg PJ, Gur RC, Gur RE. Remediation of Wisconsin Card Sorting Test performance in patients with schizophrenia: A Meta-analysis. The International Neuropsychological Society, Toronto, Canada, 2002.

3. Siegel SJ, Winey Pierre J, Liang Y, Irani F, Maxwell C, Salama R, Weightman BD, Kirshner M, Pollock B, Lewis D, Gur RC, Gur RE. Title: Surgically implantable antipsychotic medication: release kinetics in animals and patient attitudes towards long-term delivery devices. American College of Neuropsychopharmacology, San Juan, Puerto Rico, 2002.

- 4. Calkins ME, Gur RC, Ragland JD, Gur RE. Face recognition memory deficits in schizophrenia patients and their relatives: Comparison with visual object memory performance. International Congress on Schizophrenia Research, Colorado Springs, Colorado, 2003.
- 5. Gur RE, Turetsky BI, Ragland JD, Gur RC. Habituation of the hemodynamic response during novelty detection in schizophrenia. International Congress on Schizophrenia Research, Colorado Springs, Colorado, 2003.
- 6. Kurtz M, Moberg PJ, Ragland JD, Gur RC, Gur RE. Symptoms versus neurocognitive test performance as predictors of psychosocial status in schizophrenia: A 1- and 4-year prospective study. International Congress on Schizophrenia Research, Colorado Springs, Colorado, 2003.
- 7. Lowery N, Ragland JD, Indersmitten T, Gur RE, Gur RC. The contribution of controlled aspects of semantic processing to verbal memory encoding and semantic fluency deficits in schizophrenia. International Congress on Schizophrenia Research, Colorado Springs, Colorado, 2003.
- 8. Kurtz M, Ragland JD, Moberg PJ, Gur RC. The Penn Conditional Exclusion Test: A New Measure of Executive Function With Alternative Forms for Repeat Administration. 31st Annual International Neuropsychological Society Conference, Honolulu, Hawaii, 2003.
- 9. Ragland JD, Gur RC, Valdez J, Gur RE. Effect of schizophrenia on frontotemporal activity during word encoding and recognition: An event-related fMRI study. International Congress on Schizophrenia Research, Colorado Springs, Colorado, 2003.
- 10. Calkins ME, Moberg PJ, Gur RC, Gur RE, Turetsky BI. Memory-delineated subtypes of schizophrenia: Performance in biological relatives. Society of Biological Psychiatry Annual Meeting, New York, New York, 2004.
- 11. Gur RC, Verma R, Davatzikos C, Gur RE. Using DTI to test hypotheses on sex differences in brain organization. New York Academy of Sciences Diffusion Tensor Imaging Workshop. New York, New York, August, 2004.
- 12. Gur RE, Almasy L, Nimgaonkar V, Pogue-Geile M, Ragland JD, Blangero J, Gur RC. Pleiotropic genetic effects in multiplex multigenerational families with schizophrenia on endophenotypic measures of memory and emotion processing. Society for Neuroscience, San Diego, California, 2004.
- 13. Gur RC, Verma R, Loughead J, Davatzikos C, Kohler C, Gur RE. Face processing as a tool for probing the neurobiology of affect: Methods and initial results. 43rd Annual Meeting of

the American College of Neuropsychopharmacology, San Juan, Puerto Rico, 2004.

14. Irani F, Dankert M, Brensinger C, Bilker WB, Nair NR, Kohler CG, Kanes SJ, Turetsky BI, Moberg PJ, Ragland JD, Gur RC, Gur RE, Siegel SJ. Patient attitudes towards surgically-implantable, long-term delivery of psychiatric medicine. American Psychiatric Association annual meeting New York, New York, 2004.

- 15. Moelter ST, Ragland JD, Friedman K, Moberg PJ, Gur RC, Gur RE, Turetsky BI. Does animal fluency reveal cognitive and neuroanatomical heterogeneity in schizophrenia? 33rd annual meeting of the International Neuropsychological Society, St.Louis, Missouri, 2004.
- 16. Ragland JD, Valdez J, Gur RC, Elliott M, Gur RE. Effect of schizophrenia on fMRI activity during shallow and deep word encoding. Human Brain Mapping, Budapest, Hungary, 2004.
- 17. Ragland JD, Valdez J, Loughead J, Gur RC, Elliot M, Gur RE. Diffuse cortical and sub-cortical over-activation during source monitoring in schizophrenia. 43rd Annual Meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico, 2004.
- 18. Ragland JD, McCarthy E, Valdez J, Brensinger C, Bilker WB, Gur RC, Gur RE. Levels-of-processing effect on source monitoring in schizophrenia. 43rd Annual Meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico, 2004.
- 19. Moelter ST, Kohler C, Ragland JD, Gur RC. Progression of Neuropsychological Deficits in a Case of Marchiafava-Bignami Disease. International Neuropsychological Society, Baltimore, Maryland, 2004.
- 20. Stewart CA, Cerhan J, Ragland JD, Gur RC, Smith G. Correlates Between Traditional and Computerized Neuropsychological Testing in Hepatic Encephalopathy. The Liver Meeting, Boston, Massachusetts, 2004.
- 21. Gur RC, Davatzikos C, Shen D, Xiaoyng W, Fan Y, Hughett P, Turetsky BI, Gur RE. Whole-brain deformation based morphometry MRI study of schizophrenia. International Congress on Schizophrenia Research, Savannah, Georgia, 2005.
- 22. Gur RE, Calkins ME, Ragland JD, Richard J, Gur RC. Neurocognitive measures in genetic studies of schizophrenia. International Congress on Schizophrenia Research, Savannah, Georgia, 2005.
- 23. Gur RE, Laura Almasy L, Kohler C, Gur RC. Emotion processing as an endophenotypic measure in family studies of schizophrenia. World Congress of Biological Psychiatry, Vienna, Austria, 2005.
- 24. Ragland JD, Moelter ST, Valdez J, Gur RC, Gur RE. Controlled versus automatic semantic retrieval in schizophrenia: A compressed image acquisition overt word production fMRI study. International Congress on Schizopohrenia Research, Savannah, Georgia, 2005.

1. Gur RE, Gur RC. Correlates of conjugate lateral eye movement behavior in humans. In S. Harnad et al (eds.), <u>Lateralization in the nervous system</u>. New York: Academic Press, 1976.

- 2. Gur RE, Levy J, Gur RC. Clinical studies of brain organization and behavior. In A. Frazer, A. Winokur (eds.), <u>Biological basis of psychiatric disorders</u>. New York: Spectrum, 1977.
- 3. Sackeim HA, Gur RC. Self-confrontations, self-deception and consciousness. In G.E. Schwartz, D. Shapiro (eds.), <u>Consciousness and self-regulation: advances in research</u>. New York: Plenum Press, 1978.
- 4. Gur RC. Imagery, absorption and the tendency toward "mind exploration" as correlates of hypnotic susceptibility in males and females. In F.H. Frankel, H.S. Zamansky (eds.), https://example.com/hypnosis-at-its-bicentennial:-selected-papers. New York: Plenum, 1978.
- 5. Gur RC, Gur RE. Handedness and individual differences in hemispheric activation. In J. Herron (ed.), <u>The Neuropsychology of left-handedness</u>. New York: Academic Press, 1979.
- 6. Levy J, Gur RC. Individual differences in psychoneurologicalorganization. In J. Herron (ed.), <u>The neuropsychology of left-handedness</u>. New York: Academic Press, 1979.
- 7. Sackeim HA, Gur RC. Facial symmetry, perceiver biases and the communication of emotion. In J.T. Cacioppo, R.E. Petty (eds.), Social Psychophysiology. New York: Guilford, 1983.
- 8. Gur RC. Measurement and imaging of regional brain function: Implications for neuropsychiatry. In P. Flor-Henry, J. Gruzelier (eds.), <u>Laterality and psychopathology</u>. Amsterdam: Elsevier, 1983.
- 9. Reivich M, Gur RC. Sensory and psychological effects on local glucose metabolism in humans. In M. Reivich (ed.), <u>Positron emission tomography</u>. New York: Liss, 1985.
- 10. Gur RC, Gur RE, Sussman NM, Selzer M. Positron emission tomography in epilepsy. In M. Reivich (ed.), Positron emission tomography. New York: Liss, 1985.
- 11. Gur RC. Measurement of regional brain physiology in humans: early applications in behavioral neurology. In M-M. Mesulam (ed.), <u>Principles of behavioral neurology</u>. Philadelphia: F.A. Davis, 1985.
- 12. Alavi A, Chawluk JB, Hurtig HI, Dann RW, Saykin AJ, Gur RC, Reivich M. Determination of regional cerebral function and structure in normal aging and dementia with positron emission tomography (PET), magnetic resonance imaging (MRI) and x-ray computed tomography (XCT). In H. Hafner, G. Moschel, N. Sartorius (eds.), Mental health in the elderly. Heidelberg: Springer-Verlag, 1985.
- 13. Gur RC, Gur RE. Hemispheric specialization and regional cerebral blood flow. In A. Glass (ed.), <u>Individual differences in hemispheric specialization</u>. New York: Plenum Publications, 1987.
- 14. Gur RC. Imaging the activity of the human brain. National Forum, 1987, 67, 13-16.

15. Gur RC. Integration of multifaceted data on regional brain function: from metabolic images to behavioral images. In R. Takahashi, P. Flor-Henry, J. Gruzelier, S. Niwa (eds.), <u>Cerebral dynamics</u>, <u>laterality and psychopathology</u>. Amsterdam: Elsevier, 1987.

- 16. Gur RC. Atlas of brain imaging: The 133-Xenon inhalation technique. <u>Masters in Psychiatry</u>, 1987.
- 17. Gur RC, Gur RE, Saykin AJ. The neuropsychological study of schizophrenia. In C.A. Tamminga, S.C. Schulz (eds.), <u>Advances in Neuropsychiatry and Psychopharmacology</u>, Vol 1. <u>Schizophrenia Research</u>. New York: Raven Press, 1991, pp.153-162.
- 18. Gur RC, Gur RE. The use of neuroimaging techniques in brain injury. In J. Dywan, R. Kaplan (eds.), Neuropsychology and the Law. New York:Springer-Verlag, 1991.
- 19. Gur RC, Gur RE. The impact of neuroimaging on human neuropsychology. In R.G. Lister, H.J. Weingartner (eds.), <u>Perspectives on Cognitive Neuroscience</u>. Oxford University Press, 1991, 23, 417-435.
- 20. Gur RC, Gur RE. Laterality in schizophrenia: PET studies. In N.D. Volkow (ed), <u>Positron Emission Tomography in Schizophrenia</u>, 1991, <u>3</u>, 47-58.
- 21. Gur RC, Saykin AJ, Gur RE. Neuropsychological assessment in psychiatric research and practice. In S.B. Guze, J. Helzer (eds), <u>Psychiatry</u>, 1991, <u>72</u>, 1-16.
- 22. Gur RC, Gur RE. Neurobehavioral and neuroimaging data in the medical-legal context. In H.V. Hall, R.J. Sbordone (eds.), <u>Disorders of Executive Functions: Civil and Criminal Law Applications</u>, 1993, 4, 107-122.
- 23. Gur RC. Neuropsychological methods for evaluating regional brain dysfunction. In A. Wilner (ed.), <u>Cerebral Damage Before and After Cardiac Surgery</u>. England: Kluwer, 1993, 8, 101-111.
- 24. Gur RC, Gur RE, Saykin AJ. Behavioral Imaging: The Neuropsychological Assessment. In K. Maurer (ed.), <u>Imaging of the Brain in Psychiatry and Related Fields</u>. New York: Springer-Verlag, 1993, 351-361.
- 25. Gur RC, Saykin AJ, Gur RE. Brain function in schizophrenia: application of neurobehavioral studies. In N.C. Andreasen (ed.), <u>Schizophrenia</u>: <u>From Mind to Molecule</u>, 1994, 5, 93-104.
- 26. Gur RC, Gur RE. Methods for the study of brain-behavior relationships. In A. Frazer, P.B. Molinoff, A. Winokur (eds.), <u>Biological Bases Of Brain Function and Disease</u>. Raven Press. 1994, <u>15</u>, 261-279.
- 27. Gur RC, Gur RE. The potential of physiological neuroimaging for the study of schizotypy: experiences from applications to schizophrenia. In A. Raine, T. Lencz, S.A. Mednick (eds.), Schizotypal Personality. Cambridge University Press, 1995, 17, 406-425.

30. Gur RC, Gutierrez JM, Holdnack JA, Mahr RN. Neurobehavioral probes as applied in physiologic neuroimaging studies: Methodologic considerations. In E.D. Bigler (ed.), <u>Handbook of Human Brain Function: Neuroimaging</u>. New York: Plenum Press, 1996, <u>10</u>, 199-214.

- 31. Gur RC, Moberg PJ, Gur RE. Aging and cognitive functioning. In R. Lavizzo-Mourey, M. Forciea (eds.), *Geriatric Secrets*, 1996, 26, 126-129. 3rd Edition in press.
- 32. Gur RE, Gur RC. Blood flow and metabolism in schizophrenia. In R. Mathew (ed.), <u>Cerebral Blood Flow in Neuropsychiatric Disorders</u>. Great Neck, NY: PMA Publishing Corp., in press.
- 33. Gur RE, Gur RC. Schizophrenia: Brain Structure and Function. In H.I. Kaplan, B.J. Sadock (eds.), <u>Comprehensive Textbook of Psychiatry/VII</u>, Philadelphia: Lippincott Williams & Wilkins, 2000.
- 34. Gur RC, Cowell P, Gur RE. Gender Differences in Neuropsychological Testing. To appear in L.J. Dickstein, B.L. Kennedy (eds.), <u>Gender Differences in the Brain: Linking Biology to Psychiatry</u>. New York:Guilford Publications, Inc.
- 35. Gur, R.C., Moelter, S.T., Ragland, JD. "Learning and memory in schizophrenia". In, Sharma, T., & Harvey, P. (Eds.), Cognition in Schizophrenia. Oxford University Press: Oxford, G.B., 1999.
- 36. Gur RC, Gur RE. Neuroimaging applications in the elderly. American Journal of Geriatric Psychiatry, 2002, 10, 5-11.
- 37. Gutierrez, JM and Gur, RC. A computerized forced-choice method for detection of malingering. in: CR Reynolds (Editor) Detection of During Head Injury Litigation (Critical Issues in Neuropsychology). New York: Planum 1998.

COMMENTARIES:

- 1. Gur RC. Measuring hypnotic susceptibility: A guest editorial. <u>American Journal of Clinical Hypnosis</u>, 1979, <u>21</u>, No. 2 and 3, (October 1978/January 1979). (Two issues devoted to the psychometrics of hypnotizability, edited by RC Gur).
- 2. Gur RE, Gur RC. A note on Levick and Voneida: Eye movements in schizophrenics vs. normal subjects. <u>Archives of General Psychiatry</u>, 1979, <u>36</u>, 493-494.
- 3. Sackeim HA, Gur RC. Asymmetry in facial expression. <u>Science</u>, 1980, <u>209</u>, 834-836.
- 4. Sackeim HS, Gur RC. Voice recognition and the ontological status of self-deception. <u>Journal of Personality and Social Psychology</u>, 1985, <u>48</u>, 1365-1368.
- 5. Gur RE, Skolnick BE, Gur RC. Gruzelier's "reconsideration" considered. (Response to J. Gruzelier's reconsideration of Gur et al [1983] conclusions). <u>Archives of General</u> Psychiatry, 1985, 42, 633.
- 6. Saykin AJ, Gur RC. A review of Neuropsychological Assessment of Neuropsychiatric

Disorders. In I. Grant, K.M. Adams (eds.), New York, Oxford University Press, 1986.

7. Gur RC. Do we have a research method for studying self reports? A review of A. Giorgi (ed.), Phenomenology and psychological research. <u>Contemporary Psychology: A Journal of Reviews</u>, 1987, <u>32</u>, 547-548.

- 8. Nasrallah HA, Mitchell AJ, Gur RE, Gur RC, Turetsky BI, Cannon TD, Mozley PD. Brain and CSF Volume Differences in Schizophrenic Subtypes. <u>American Journal of Psychiatry</u>, 1995, <u>152</u>, 817-818.
- 9. Gur RC, Gur RE. Hypofrontality in schizophrenia: RIP. The Lancet, 1995, 345, 1383-1384.
- 10. Lenkinsky RE & Gur RC. MRS: A novel tool for studying brain function. <u>Contemporary Psychology: A Journal of Reviews</u>, 1997, <u>42</u>, 351-352.
- 11. Moberg, P.J., Doty, R.L., Turetsky, B.I., Arnold, S.E., Mahr, R.N., Gur, R.C., Bilker, W., & Gur, R.E. . Olfactory identification abilities deteriorate in patients with schizophrenia, even for those with relatively recent onset [letter; reply]. American Journal of Psychiatry, 1998, 155, 1463-1464.
- 12. Gur RC &.McBride, T. Toward a unitary description of neuropsychological functions: a review of Handbook of Clinical and Experimental Neuropsychology Edited by Gianfranco Denes and Luigi Pizzamiglio. <u>Contemporary Psychology</u>, 2000, <u>45</u>, 682-683.

BOOKS:

Gur RE, Andreasen NA, Asarnow R, Gur RC, Jones P, Kendler K, Matcheri K, Lieberman J, McCarley R, Murray R, Rapoport J, Tamminga C, Tsuang M, Walker E, Weinberger D. Commission on Schizophrenia. In D.L. Evans, E. Foa, R.E. Gur, H. Hendrin, C. O'Brien, M. Seligman, B.T. Walsh, (Eds), Treating and Preventing Adolescent Mental Health Disorders: What We Know and What We Don't Know. New York: Oxford University Press, The Annenberg Foundation Trust at Sunnylands, and the Annenberg Public Policy Center of the University of Pennsylvania, 2005.

PATENT:

Gur RC, Gur RE, Trivedi SS. "Behavioral Imaging: Topographic Display of Neuropsychological Data, U.S. Patent No. 4862359.

ATTACHMENT B

UNIVERSITY OF PENNSYLVANIA - SCHOOL OF MEDICINE Curriculum Vitae

Date: Decamber 2008

Ruben C. Gur, Ph.D.

HOME ADDRESS:

OFFICE ADDRESS: Brain Behavior Laboratory

Department of Psychiatry

10 Gates Building

University of Pennsylvania Philadelphia, PA 19104-4283

EDUCATION: 1967-70 B.A. Hebrew University of Jerusalem

1970-71 M.A. Michigan State University 1971-73 Ph.D. Michigan State University

1973-74 Postdoctoral Fellowship, Stanford University

POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:

Doctorate: 1971 NIMH

Summer Traineeship, Psychiatric Clinic

Oakland County Juvenile Court

Pontiac, Michigan

1971-72 Psychology Internship, Psychiatric Clinic

State Prison of Southern Michigan

Jackson, Michigan

1972-73 Psychology Internship, Counseling Center

Michigan State University East Lansing, Michigan

Postdoctorate: 1973-74 Research Associate, Department of Psychology

Stanford University, Stanford, California

1974-76 Postdoctorate supervised clinical experience

Department of Psychiatry University of Pennsylvania

MILITARY SERVICE: 1965-67 Israeli Defense Forces

FACULTY APPOINTMENTS:

1974-81 Assistant Professor

Department of Psychology

University of Pennsylvania School of Medicine

Philadelphia, PA

1981-84 Research Associate Professor of Psychology

in Neurology and Psychiatry

University of Pennsylvania School of Medicine

Philadelphia, PA

1984-88 Associate Professor of Psychology in

Psychiatry and Neurology

University of Pennsylvania School of Medicine

Philadelphia, PA

1988-Present Professor of Psychology in Psychiatry,

Neurology and Radiology

University of Pennsylvania School of Medcine

Philadephia, PA

HOSPITAL AND ADMINISTRATIVE APPOINTMENTS:

1974-81 Supervisor, Clinical Training Program

Department of Psychology

University of Pennsylvania School of Medicine

Philadelphia, PA

1982-84 Director of Neuropsychology

Department of Neurology The Graduate Hospital Philadelphia, PA

1984-Present Director of Neuropsychology and the

Brain Behavior Laboratory, Department of Psychiatry

Hospital of the University of Pennsylvania

Philadelphia, PA

2005-Present Director of the Center for Neuroimaging in Psychiatry

Department of Psychiatry

Hospital of the University of Pennsylvania

Philadelphia, PA

2005-Present Staff Psychologist

Philadelphia Veterans Administration Hospital

3

Philadelphia, PA

BOARD SPECIALTY CERTIFICATION:

Diplomate in Clinical Neuropsychology American Board of Professional Psychology

LICENSURE: Licensed Psychologist, Commonwealth of Pennsylvania

AWARDS, HONORS AND MEMBERSHIP IN HONORARY SOCIETIES:

Erickson Award for Scientific Excellence for Writing in Hypnosis NARSAD Distinguished Investigator Award Member, Sigma Xi Elected to Fellow status, National Academy of Neuropsychologists, 1986 Elected to Fellow status, American Psychological Association, Divisions 6 & 30, 1987 Recipient of 1990 Stephen V. Logan Award, National Alliance for the Mentally Ill (NAMI) Elected to Fellow status, The American Psychological Society, 1992

MEMBERSHIP IN PROFESSIONAL AND SCIENTIFIC SOCIETIES:

American Psychological Association, FELLOW American Psychological Society, FELLOW American College of Neuropsychopharmacology The John Morgan Society American Association for the Advancement of Science International Neuropsychological Society National Academy of Neuropsychologists The New York Academy of Science International Society for Neuroimaging in Psychiatry

EDITORIAL/ADVISORY POSITIONS:

Member, NIH Study Section on Clinical Neuroscience and Biological Psychopathology (1993-1996)

Editorial Board: Archives of Clinical Neuropsychology (1985-1997), Journal of Mental Imagery (1984-present), Brain and Cognition (1989-present), Brain and Language (1990-present), Brain Imaging and Behavior (1994-present; founding member), Social Neuroscience (founding member). Consultant to Panel on Neurological Aspects of Behavior: Development of a National Research Strategy for NIH (1979) Schizophrenia Research (2004-present)

Advisory Board: The Greenwall Initiative on Imaging and Treating the Human Brain: Ethical and Social Implications. The Center for Bioethics, University of Pennsylvania; Institute for Strategic Threat Analysis and Response (ISTAR), University of Pennsylvania, (2002-) The Conte Center on the Neurobiology of Suicide, Columbia University (J Mann, MD, PI), Boston Center for Intervention Development and Applied Research (CIDAR is a NIMHsponsored program project, "Vulnerability to Progression in Schizophrenia".

Action Editor: Brain and Cognition (2002-present)

ACADEMIC COMMITTEES AT THE UNIVERSITY OF PENNSYLVANIA:

1975-1977	Admissions Committee, Psychology Department
1984-1994	Research Committee, Psychiatry Department
1984-1987	Computer Task Force, Psychiatry Department
1984-1988	Chairman's Council for Planning and Development, Psychiatry Department
1990-1992	Senate Committee on Academic Freedom and Responsibility
1996-1998Search Committee for Chair of Radiology	
2000-2002	Search Committee for fMRI Physicist
1999-Present	University Scholars Council

MAJOR TEACHING & CLINICAL RESPONSIBILITIES AT THE UNIVERSITY OF PENNSYLVANIA:

A. Teaching:

- 1. Co-founder and Advisor, Biological Basis of Behavior Undergraduate Major program.
- 2. Supervisor of postdoctoral Fellows (NIMH Training Grant) and doctoral students
- 3. Member of dissertation committees.
- 4. Rounds and teaching conferences for Psychiatry residents and Neuropsychology Fellows
- 5. Supervisor of undergraduate Honors theses.

B. Clinical:

- 1. Director of Neuropsychology, Department of Psychiatry, Hospital of the University of Pennsylvania
- 2. Supervisor of interns and practicum students in neuropsychology.
- 3. Director of Forensic Neuropsychiatry Center.

PRESENTATIONS & LECTURES BY INVITATION: (Outside Philadelphia, Past 5 years)

- March 4, 2002. "Imaging Studies of Emotion Processing Examining the Effects of Age, Gender, and Disease." University of Iowa School of Medicine, Research Seminar, Iowa City, IA
- March 5, 2002. "Behavioral and Neurobiologic Markers of Brain Dysfunction and Genetic Vulnerability to Schizophrenia." University of Iowa School of Medicine, Grand Rounds. Iowa City, IA
- April 14, 2002. "The Neurobiology of Sex Differences in the Symptoms and Course of Schizophrenia" Advocates for the Jewish Mentally Ill, Wynnewood, PA
- May 5, 2002. "The Science of Deceit: The Polygraph and its Progeny" Judicial In Service Training, Washington D.C.
- May 22, 2002. "Functional and Structural Imaging Studies of Emotion Processing" Massachusetts General Hospital, Grand Rounds, Charlestown, MA
- Oct 10, 2002. "What to do About Girls, Boys and Brains: Sex Differences From Phylogeny to

- Ontogeny" CAIS Commission of Women in Independent School's Annual Conference, Farmington, CT
- Oct 23, 2002. "Neurobehavioral Measures as Endophenotypic Markers in Schizophrenia" State University of New York, Grand Rounds, Albany, NY
- November 1, 2002 "Sex Differences in Learning" Learning and the Brain Conference, Cambridge, MA
- November 2, 2002 "Imaging and Other Brain Function Issues" The Third National Seminar on Mental Health and the Criminal Law, Atlanta, GA
- November 29, 2002 "Integration of Behavior, Anatomy and Physiology in the Search for Neural Substrates of Cognitive and Emotion Processing in Healthy People" 12th Australian Society for Psychophysiology Conference. University of Sydney, Australia
- November 8, 2002 "Bio-Cognitive Aspects of Schizophrenia" Psychology Senior Seminar, Haverford College, Haverford, PA
- January 15, 2003 "Adolescent Brain Development, Executive Functions, and Culpability" American Bar Association, Washington, D.C.
- February 14, 2003 "Neural Substrates of Emotion Processing" Psychiatric Research Society, Park City, Utah
- May 12, 2003 "The New Era of Neuropsychology; Neural Systems Probed Behaviorally and with Imaging" Mayo Clinic, Rochester, Minnesota
- May 29, 2003 "Cognitive Impairment in Schizophrenia" 43rd Annual New Clinical Drug Evaluation Unit, Boca Raton, FL
- September 21, 2003 "The Measurement of Emotion Processing: Exploring the Dark Side of the Moon" 3rd US-Korean Workshop on Psychiatric Genetics, Seoul, Korea
- November 29, 2003 Neuroimaging studies in schizophrenia". Keynote to Symposium: Kognitive Störungen bei schizophrenen Erkrankungen III: Negative and positive symptoms in schizophrenia models, methods and results. Ruhr-Universität Bochum Internationales Begegnungszentrum, Bochum, Germany.
- December 11, 2003 "Developmental Differences Between Adolescents and Adults" Illinois Juvenile Justice Symposium, Chicago, Illinois.
- February 11, 2004 "Information Processing in Schizophrenia: an fMRI study" Psychiatric Research Society, Park City, Utah.
- February 25, 2004 "Implications of New Brain Imaging Research to Criminal Culpability of Adolescents" Briefing on Adolescent Development, National Press Club, Washington D.C.
- March 9, 2004 "Facial Recognition as an Endophenotypic Marker in Autism" NIH sponsored

Autism Genetics In the Pacific Rim, University of California - Los Angeles Medical Center. Los Angeles, California.

- April 1, 2004 "Teaching Science to Myelinating and Pruning Brains Constructed During the Middle Pleistocene Epoch: The Challenge of Dealing with Brain Maturation in Boys and Girls." NSTA, National Science Teachers Association, Atlanta, Georgia.
- May 21st, 2004 "Using Brain Research in Juvenile Representation" Southwest Regional Juvenile Defender Center's (SWJDC) 2004 Regional Summit, Zealous Advocacy = Best Interests, Houston, Texas.
- June 17th, 2004 "Research in Family Schizophrenia" Harrisburg State Hospital, Harrisburg, Pennsylvania.
- June 21, 2004 "Psychopharmacology of Emotions" 24th Annual Collegium Internationale Neuro-Psychopharmacolgicum (CINP) Congress-Paris. Paris, France.
- June 23, 2004 "Endophenotypic Measures in Brain Behavior Studies in Schizophrenia" Bordeaux University, Bordeaux, France.
- July 24, 2004 "The Developing Brain and the Technology That Let's Us See It" 25th Annual Capital Punishment Training Conference, Warrenton, Virginia.
- September 16, 2004 "Are Sex Differences in Brain Anatomy and Physiology Related to Sex Differences in Emotion Regulation, Personality, and Aggression?" Sex, Brain and Human Aggression Conference, Delmenhorst, Germany.
- October 18, 2004 "Recent Discoveries of Cognitive Neuroscience Using Brain Imaging" Brain Imaging and the Cognitive Sciences Conference, Washington, D.C.
- April 2, 2005 "Episodic Memory and Affective Processing in Schizophrenia" The 7th Biennial Mt. Sinai Conference on Cognition in Schizophrenia, Savannah, GA.
- April 11, 2005 "Brain Development and its Relevance to the Juvenile Death Penalty" Cornell Law School; Prof Blume's class, Ithaca, NY.
- April 11, 2005 "Aggression and Deception: Some Legal Implications of Recent Advances in Neuroimaging and Neuroscience, Cornell Law School, Ithaca, NY.
- April 22, 2005 "Understanding Brain Development" The National Seminar on the Development and Integration of Mitigation Evidence, Salt Lake City, UT.
- April 22, 2005 "Schizophrenia: The Positive and Negative Symptoms" The National Seminar on the Development and Integration of Mitigation Evidence, Salt Lake City, UT.
- August 18, 2005 "Emotion: The Unwelcome Guest at the Cognitive Party" Ben Gurion University of the Negev, Beersheva, Israel.
- September 10, 2005 "Brain 101: Knowing Brain Development, Function and Disorder can Save

- Your Client's Life." Florida Public Defenders Association: Life Over Death Conference, Orlando, FL.
- November 18, 2005 "The Developing Adolescent Brain" OPD, Capital Defense Division Capital Training Seminar, Baltimore, MD.
- November 28, 2005 "Emotion: The Dark Side of Cognition. Insights from Neuroimaging Studies in Men and Women" University of Delaware, Newark, DE.
- November 28, 2005 "Verify with MRI? Functional Imaging in the Context of Lie Detection." University of Delaware, Newark, DE.
- February 10, 2006 "A Slice of Emotions: Neurobehavioral and (thinly sliced) fMRI Studies" Psychiatric Research Society Annual Meeting, Park City, UT.
- April 7, 2006. "The Developing Brain: Judgement and Impulse Control" Indigent Criminal Defense: Advanced Skills for the Experienced Practitioner Conference, Richmond, VA.
- July 12, 2006. "Sex Differences in Cerebral Function and Morphology in Mental Illness" CINP Symposium, Chicago, IL.
- August 25, 2006. "Brain Structure and Function: New Frontiers. 11th Annual Federal Habeas Corpus Center, Pittsburgh, PA.
- August 31, 2006. "Neuroimaging in the Study of Cognition and Emotion" Astra Zeneca, Wilmington, DE.
- September 15, 2006. "Imaging in Schizophrenia" The International Symposium on Schizophrenia, Gottingen Research Association for Schizophrenia, Gottingen, Germany.
- September 29, 2006 "The Inherent Mitigation of Youth: Brain Development in Adolescents and Young Adults. Making the Case for Life Conference, Las Vegas, NV.
- November 13, 2006 "Brain Behavior Relationship of Normal and Disturbed Emotions in Schizophrenia and Autism" DFG International Research Training Group, Aachen University, Aachen, Germany.
- April 20, 2007 "Gender Differences in Cerebral Function and Morphology in Normal Subjects. Advances in Neuroscience Conference, Napoli, Italy.
- October 6, 2007 "Brain Function, Gender and Age" ASTAR National Judges' Science School. Baltimore, MD.
- October 11, 2007 "Neurobiology of Sex Differences: Potential Relevance to Women in Science" Women's Leadership Board Meeting, Cambridge, MA.
- November 16, 2007 "Brain Imaging" Ohio Association of Criminal Defense Lawyers. Columbus, Ohio.

April 2, 2008 "Cutting Edge Neuroscience" Capital Habeas Corpus Unit Conference, Fort Lauderdale, FL.

- November 7, 2008 "Some Advances in Cognitive and Affective Neuroscience with Potential Legal Relevance: Neuroimaging of Brain and Behavior" Institute for Social Science Faculty Fellows and Law faculty, Cornell University, Ithaca, New York
- November 8, 2008 "Brain Development in Healthy and Vulnerable Populations: Lessons from Neuroimaging and Behavioral Measures", Joint Human Development, Psychology and Center for Behavioral Economics and decision Science Colloquium, Cornell University, Ithaca, New York
- Nov. 19, 2008 "Is fear special? Studies on the affective neuroscience of schizophrenia" Grand Rounds at University of Illinois in Chicago, Department of Psychiatry, Chicago, Illinois

ORGANIZING ROLES IN SCIENTIFIC MEETINGS: None.

BIBLIOGRAPHY:

Research Publications, peer reviewed:

- 1. Alexander LT, Gur RC, Gur RE, Patterson L. Peer assisted learning. <u>Improving Human Performance Quarterly</u>, 1974, <u>3</u>, 175-186.
- 2. Gur RC, Gur RE. Handedness, sex and eyedness as moderating variables in the relation between hypnotic susceptibility and functional brain asymmetry. <u>Journal of Abnormal Psychology</u>, 1974, <u>83</u>, 635-643.
- 3. Gur RC. An attention-controlled operant procedure for enhancing hypnotic susceptibility. <u>Journal of Abnormal Psychology</u>, 1974, <u>83</u>, 635-643.
- 4. Gur RE, Gur RC, Marshalek B. Classroom seating and functional brain asymmetry. <u>Journal of Educational Psychology</u>, 1975, <u>67</u>, 151-153.
- 5. Gur RC, Hilgard ER. Visual imagery and discrimination of differences between altered pictures simultaneously and successively presented. <u>British Journal of Psychology</u>, 1975, 66, 341-345.
- 6. Gur RE, Gur RC. Defense mechanisms, psychosomatic symptomatology and conjugate lateral eye movements. <u>Journal of Consulting and Clinical Psychology</u>, 1975, <u>43</u>, 416-420.
- 7. Gur RE, Gur RC, Harris LJ. Cerebral activation, as measured by subject's lateral eye movements, is influenced by experimenter location. <u>Neuropsychologia</u>, 1975, <u>13</u>, 35-44.
- 8. Gur RC, Sackeim HA, Gur RE. Classroom seating and psychopathology: some initial data. <u>Journal of Abnormal Psychology</u>, 1976, <u>85</u>, 122-124.
- 9. Gur RC, Reyher J. The enhancement of creativity via free imagery and hypnosis.

- American Journal of Clinical Hypnosis, 1976, 85, 237-249.
- 10. Sackeim HA, Packer IK, Gur RC. Hemisphericity, cognitive set and susceptibility to subliminal perception. <u>Journal of Abnormal Psychology</u>, 1977, <u>86</u>, 624-630.
- 11. Gur RE, Gur RC. Sex differences in the relations among handedness, sighting-dominance and eye acuity. <u>Neuropsychologia</u>, 1977, <u>15</u>, 585-590.
- 12. Sackeim HA, Gur RC, Saucy MC. Emotions are expressed more intensely on the left side of the face. <u>Science</u>, 1978, <u>202</u>, 434-436.
- 13. Gur RC, Sackeim HA. Self-confrontation and psychotherapy. <u>Psychotherapy</u>: <u>Theory</u>, <u>Research and Practice</u>, 1978, <u>15</u>, 258-265.
- 14. Sackeim HA, Gur RC. Lateral asymmetry in intensity of emotional expression. Neuropsychologia, 1978, 16, 473-481.
- 15. Sackeim HA, Gur RC. Self-deception, other-deception, and self-reported psychopathology. <u>Journal of Consulting and Clinical Psychology</u>, 1979, <u>47</u>, 213-215.
- 16. Gur RC, Sackeim HA. Self-deception: A concept in search of a phenomenon. <u>Journal of Personality and Social Psychology</u>, 1979, <u>37</u>, 147-169.
- 17. Sackeim HA, Nordlie JW, Gur RC. A model of hysterical and hypnotic blindness: cognition, motivation and awareness. <u>Journal of Abnormal Psychology</u>, 1979, <u>88</u>, 474-489.
- 18. Gur RC, Reivich M. Cognitive task effects on hemispheric blood flow in humans: evidence for individual differences in hemispheric activation. <u>Brain and Language</u>, 1980, <u>9</u>, 78-92.
- 19. Gur RC, Packer IK, Hungerbuhler JP, Reivich M, Obrist WD, Amarnek WS, Sackeim HA. Differences in the distribution of gray and white matter in human cerebral hemispheres. Science, 1980, 207, 1226-1228.
- 20. Sackeim HA, Greenberg MS, Weiman AL, Gur RC, Hungerbuhler JP, Geschwind N. Hemispheric asymmetry in the expression of positive and negative emotions: Neurological Evidence. Archives of Neurology, 1982, 39, 210-218.
- 21. Gur RC, Sussman NM, Alavi A, Gur RE, Rosen AD, O`Connor M, Goldberg HI, Greenberg JH, Reivich M. Positron emission tomography in two cases of childhood epileptic encephalopathy (Lennox-Gastaut Syndrome). Neurology, 1982, 32, 1191-1194.
- 22. Gur RC, Gur RE, Obrist WD, Hungerbuhler JP, Younkin D, Rosen AD, Skolnick BE., Reivich M. Sex and handedness differences in cerebral blood flow during rest and cognitive activity. <u>Science</u>, 1982, <u>217</u>, 659-661.
- 23. Sussman NM, Gur RC, Gur RE, O'Connor MJ. Mutism as a consequence of callosotomy. <u>Journal of Neurosurgery</u>, 1983, <u>59</u>, 514-519.
- 24. Gur RC, Gur RE, Rosen AD, Warach S, Alavi A, Greenberg J, Reivich M. A cognitive-

motor network demonstrated by positron emission tomography. <u>Neuropsychologia</u>, 1983, 21, 601-606.

- 25. Natale M, Gur RE, Gur RC. Hemispheric asymmetries in processing emotional expressions. Neuropsychologia, 1983, 21, 555-565.
- 26. Reivich M, Gur RC, Alavi A. Positron emission tomography studies of sensory stimuli, cognitive processes and anxiety. <u>Human Neurobiology</u>, 1983, <u>2</u>, 25-33.
- 27. Gur RE, Skolnick BE, Gur RC, Caroff S, Rieger W, Obrist WD, Younkin D, Reivich M. Brain function in psychiatric disorders: I. Regional cerebral blood flow in medicated schizophrenics. <u>Archives of General Psychiatry</u>, 1983, 40, 1250-1254.
- 28. Gur RE, Gur RC, Sussman NM, O'Connor MJ, Vey MM. Hemispheric control of the writing hand: The effect of callosotomy in a left-hander. Neurology, 1984, 34, 904-908.
- 29. Reivich M, Alavi A, Gur RC. Positron emission tomographic studies of perceptual tasks. <u>Annals of Neurology</u>, 1984, <u>15</u>, 61-65 (Supplement).
- 30. Gur RE, Skolnick BE, Gur RC, Caroff S, Rieger W, Obrist WD, Younkin D, Reivich M. Brain function in psychiatric disorders: II. Regional cerebral blood flow in medicated depressives. <u>Archives of General Psychiatry</u>, 1984, 41, 695-699.
- 31. Youkin D, Hungerbuhler JP, O'Connor M, Goldberg H, Burke A, Kushner M, Hurtig H, Obrist W, Gordon J, Gur RC, Reivich M. Superficial temporal-middle cerebral artery anastomosis: Effects on vascular, neurologic, and neuropsychological functions. <u>Neurology</u>, 1985, <u>35</u>, 462-469.
- 32. Gur RE, Gur RC, Skolnick BE, Caroff S, Obrist WD, Resnick S, Reivich M. Brain function in psychiatric disorders: III. Regional cerebral blood flow in unmedicated schizophrenics. <u>Archives of General Psychiatry</u>, 1985, 42, 329-334.
- 33. Trivedi SS, Gur RC, Gur RE, Skolnick BE, Obrist WD, Reivich M, Herman GT. Imaging regional cerebral blood flow measured by the 133-Xenon technique. <u>rCBF Bulletin</u>, 1986, <u>9</u>, 175-178.
- 34. Stern MB, Gur RC, Saykin AJ, Hurtig HI. Dementia of Parkinson's disease and Alzheimer's disease: Is there a difference? <u>Journal of the American Geriatrics Society</u>, 1986, <u>34</u>, 475-478.
- 35. Gur RE, Resnick SM, Alavi A, Gur RC, Caroff S, Dann R, Silver F, Saykin AJ, Chawluk JB, Kushner M, Reivich M. Regional brain function in schizophrenia: I. A positron emission tomography study. <u>Archives of General Psychiatry</u>, 1987, <u>44</u>, 119-125.
- 36. Gur RE, Resnick SM, Gur RC, Alavi A, Caroff S, Dann R, Silver F, Saykin AJ, Chawluk JB, Kushner M, Reivich M. Regional brain function in schizophrenia: II. Repeated evaluation with positron emission tomography. <u>Archives of General Psychiatry</u>, 1987, <u>44</u>, 126-129.

37. Trope I, Fishman B, Gur RC, Sussman NM, Gur RE. Contralateral and ipsilateral control of fingers following callosotomy. <u>Neuropsychologia</u>, 1987, <u>25</u>, 287-291.

- 38. Gur RC, Gur RE, Obrist WD, Skolnick BE, Reivich M. Age and regional cerebral blood flow at rest and during cognitive activity. <u>Archives of General Psychiatry</u>, 1987, <u>44</u>, 617-621.
- 39. Gur RC, Gur RE, Resnick SM, Skolnick BE, Alavi A, Reivich M. The effect of anxiety on cortical cerebral blood flow and metabolism. <u>Journal of Cerebral Blood Flow and Metabolism</u>, 1987, <u>7</u>, 173-177.
- 40. Knight H, Millman RP, Gur RC, Saykin AJ, Doherty JU, Pack AI. Clinical significance of sleep apnea in the elderly. <u>American Review of Respiratory Disease</u>, 1987, <u>136</u>, 845-850.
- 41. Gur RC, Gur RE, Silver FL, Obrist WD, Skolnick BE, Kushner M, Hurtig HI, Reivich M. Regional cerebral blood flow in stroke: hemispheric effects of cognitive activity. <u>Stroke</u>, 1987, 18, 776-780.
- 42. Warach S, Gur RC, Gur RE, Skolnick BE, Obrist WD, Reivich M. The reproducibility of the Xe-133 inhalation technique in resting studies: task order and sex related effects in healthy young adults. Journal of Cerebral Blood Flow and Metabolism, 1987, 7, 702-708.
- 43. Trivedi SS, Gur RC. Computer graphics for neuropsychological data. <u>Proceedings of the National Computer Graphics Association</u>, 1987, <u>3</u>, 22-32.
- 44. Gur RC, Gur RE, Skolnick BE, Resnick SM, Silver FL, Chawluk JB, Muenz L, Obrist WD, Reivich M. Effects of task difficulty on regional cerebral blood flow: relationships with anxiety and performance. <u>Psychophysiology</u>, 1988, <u>25</u>, 392-399.
- 45. Schmidt ML, Gur RE, Gur RC, Trojanowski JQ. Intraneuronal and extracellular neurofibrillary tangles exhibit mutually exclusive cytoskeletal antigens. <u>Annals of Neurology</u>, 1988, <u>23</u>, 184-189.
- 46. Resnick SM, Gottlieb GL, Gur RE, Gur RC, Forciea MA, Zimmerman RA, Malamut B, Saykin AJ, Reivich M, Alavi A. Identical twins with probable Alzheimer's Disease: behavior, anatomy and physiology. <u>Neuropsychiatry</u>, <u>Neuropsychology</u> and <u>Behavioral Neurology</u>, 1988, <u>1</u>, 61-72.
- 47. Gur RC, Trivedi SS, Saykin AJ, Gur RE. "Behavioral imaging" a procedure for analysis and display of neuropsychological test scores: I. Construction of algorithm and initial clinical evaluation. <u>Neuropsychiatry</u>, <u>Neuropsychology and Behavioral Neurology</u>, 1988, <u>1</u>, 53-60.
- 48. Gur RC, Saykin AJ, Blonder LX, Gur RE. "Behavioral imaging": II. Application of the quantitative algorithm to hypothesis testing in a population of hemiparkinsonian patients. Neuropsychiatry, Neuropsychology and Behavioral Neurology, 1988, 1, 87-96.
- 49. Gottlieb GL, McAllister TW, Gur RC. Depot neuroleptics in the treatment of behavioral disorders in patients with Alzheimer's disease. <u>Journal of the American Geriatric Society</u>,

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1988, 36, 619-621.

- 50. Gottlieb GL, Gur RE, Gur RC. Reliability of psychiatric scales in patients with DAT. American Journal of Psychiatry, 1988, 145, 857-860.
- 51. Resnick SM, Gur RE, Alavi A, Gur RC, Reivich M. Positron emission tomography and subcortical glucose metabolism in schizophrenia. <u>Psychiatry Research</u>, 1988, <u>24</u>, 1-11.
- 52. Trope I, Rozin P, Gur RC. Validation of the lateral limits technique with a callosotomy patient. Neuropsychologia, 1988, 26, 673-684.
- 53. Blonder LX, Gur RE, Gur RC. The effects of right and left hemiparkinsonism on prosody. Brain and Language, 1989, 36 193-207.
- 54. Trivedi SS, Gur RC. Topographic mapping of cerebral blood flow and behavior. <u>Computers in Biology and Medicine</u>, 1989, <u>19</u>, 219-229.
- 55. Blonder LX, Gur RE, Gur RC, Saykin AJ, Hurtig HI. Neuropsychological functioning in hemiparkinsonism. <u>Brain and Cognition</u>, 1989, <u>9</u>, 177-190.
- 56. Saykin AJ, Gur RC, Sussman NM, Gur RE. Memory deficits before and after temporal lobectomy: Effect of laterality and age of onset. <u>Brain and Cognition</u>, 1989, <u>9</u>, 191-200.
- 57. Gur RE, Resnick SM, Gur RC. Laterality and frontality of cerebral blood flow and metabolism in schizophrenia: relationship to symptom specificity. <u>Psychiatry Research</u>, 1989, 27, 325-334.
- 58. Trojanowski JQ, Schmidt ML, Otvos L, Gur RC, Gur RE, Hurtig H, Lee VMY. Selective expression of epitopes in multi-phosphorylation repeats of the high and middle molecular weight neurofilament proteins in alzheimer neurofibrillary tangles. <u>Annals of Medicine</u>, 1989, <u>21</u>, 113-116.
- 59. Erwin RJ, Mawhinney-Hee M, Gur RC, Gur RE. Effects of task and gender on EEG indices of hemispheric activation: similarities to previous rCBF findings. Neuropsychiatry, Neuropsychology, and Behavioral Neurology, 1989, 2, 248-260.
- 60. Sperling MR, Gur RC, Alavi A, Gur RE, Resnick S, Oconnor MJ, Reivich M. Subcortical Metabolic Alterations in Partial Epilepsy. <u>Epilepsia</u>, 1990, <u>31</u>, 145-155.
- 61. Gur RC, Saykin AJ, Benton A, Kaplan E, Levin H, Kester DB, Gur RE. "Behavioral imaging": III. Inter-rater agreement and reliability of weightings. Neuropsychology, and Behavioral Neurology, 1990, 3, 113-124.
- 62. Gur RE, Gur RC. Gender differences in regional cerebral blood flow. <u>Schizophrenia Bulletin</u>, 1990, <u>16</u>, 247-254.
- 63. Stafiniak P, Saykin AJ, Sperling MR, Kester DB, Robinson LJ, O'Connor MJ, Gur RC. Acute naming deficits following dominant temporal lobectomy: prediction by age at first risk for seizures. Neurology, 1990, 40, 1509-1512.

64. Gur RE, Gur RC, Saykin AJ. Neurobehavioral studies in schizophrenia: implications for regional brain dysfunction. <u>Schizophrenia Bulletin</u>, 1990, <u>16</u>, 445-451.

- 65. Gur RC, Saykin AJ, Muenz LR, Trivedi S, Gur RE. Response to Yeo et al.'s critique of behavioral imaging. Neuropsychiatry, Neuropsychology, and Behavioral Neurology, 1990, 3, 304-312.
- 66. Kohn MI, Tanna NK, Herman GT, Resnick SM, Mozley PD, Gur RE, Alavi A, Zimmerman RA, Gur RC. Analysis of brain and CSF volumes from magnetic resonance imaging: methodology, reliability and validation. <u>Radiology</u>, 1991, <u>178</u>, 115-122.
- 67. Gur RE, Mozley D, Resnick SM, Levick S, Erwin R, Saykin A, Gur RC. Relations among clinical scales in schizophrenia: overlap and subtypes. <u>American Journal of Psychiatry</u>, 1991, 148, 472-478.
- 68. Gur RC, Mozley PD, Resnick SM, Gottlieb GE, Kohn M, Zimmerman R, Herman G, Atlas S, Grossman R, Berretta D, Erwin R, Gur RE. Gender differences in age effect on brain atrophy measured by magnetic resonance imaging. Proceedings for the National Academy of Sciences, 1991, 88, 2845-2849.
- 69. Gur RE, Mozley PD, Resnick SM, Shtasel D, Kohn M, Zimmerman R, Herman G, Atlas S, Grossman R, Erwin R, Gur RC. Magnetic resonance imaging in schizophrenia: I. Volumetric analysis of brain and cerebrospinal fluid. <u>Archives of General Psychiatry</u>, 1991, 48, 407-412.
- 70. Saykin AJ, Gur RC, Gur RE, Mozley D, Mozley LH, Resnick SM, Kester DB, Stafiniak P. Neuropsychological function in schizophrenia: selective impairment in memory and learning. Archives of General Psychiatry, 1991, 48, 618-624.
- 71. Reinecke LJ, Kester DB, Saykin AJ, Kaplan EF, Gur RC. Comparison of two short forms of the Wisconsin Card Sorting Test. <u>Archives of Clinical Neuropsychology</u>, 1991, <u>6</u>, 27-33.
- 72. Kester DB, Saykin AJ, Sperling MR, O'Connor MJ, Robinson LJ, Gur RC. Acute effect of anterior temporal lobectomy on musical processing. <u>Neuropsychologia</u>, 1991, <u>29</u>, 703-708.
- 73. Shtasel DL, Gur RE, Mozley PD, Richards J, Taleff MM, Heimberg C, Gallacher F, Gur RC. Volunteers for biomedical research: recruitment and screening of normal controls. <u>Archives of General Psychiatry</u>, 1991, <u>48</u>, 1022-1025.
- 74. Erwin RJ, Mawhinney-Hee M, Gur RC, Gur RE. Midlatency auditory evoked responses in schizophrenia. Biological Psychiatry, 1991, 30, 430-442.
- 75. Trope I, Rozin P, Kemler Nelson D, Gur RC. Information processing in the separated hemispheres of callosotomy patients: does the analytic-holistic dichotomy hold? <u>Brain and Cognition</u>, 1992, <u>19</u>, 123-147.
- 76. Gur RE, Gur RC. Neurotransmitters are important, but so is metabolism. Neuropsychopharmacology, 1992, 7, 63-65.

77. Malamut BL, Graff-Radford N, Chawluk J, Grossman RI, Gur RC. Memory in a case of bilateral thalamic infarction. <u>Neurology</u>, 1992, <u>42</u>:163-169.

- 78. Warach S, Gur RC, Gur RE, Skolnick BE, Obrist WD, Reivich M. Decreases in frontal and parietal lobe regional cerebral blood flow related to habituation. <u>Journal of Cerebral Blood Flow and Metabolism</u>, 1992, 12, 546-553.
- 79. Gur RC, Erwin RJ, Gur RE. Neurobehavioral probes for physiologic neuroimaging studies. <u>Archives of General Psychiatry</u>, 1992, <u>49</u>, 409-414.
- 80. Erwin RJ, Gur RC, Gur RE, Skolnick BE, Mawhinney-Hee M, Smailis J. Facial emotion discrimination: I. Task construction and behavioral findings in normals. Psychiatry Research, 1992, 42, 231-240.
- 81. Gur RC, Erwin RJ, Gur RE, Zwil AS, Heimberg C, Kraemer HC. Facial emotion discrimination: II. Behavioral findings in depression. <u>Psychiatry Research</u>, 1992, <u>42</u>, 241-251.
- 82. Heimberg C, Gur RE, Erwin RJ, Shtasel DL, Gur RC. Facial Emotion Discrimination: III. Behavioral findings in schizophrenia. Psychiatry Research, 1992, 42, 253-265.
- 83. Shtasel DL, Gur RE, Gallacher F, Heimberg C, Cannon T, Gur RC. Phenomenology and functioning in first episode schizophrenia. <u>Schizophrenia Bulletin</u>, 1992, <u>18</u>, 449-462.
- 84. Shtasel DL, Gur RE, Gallacher F, Heimberg C, Gur RC. Gender difference in the clinical expression of schizophrenia. <u>Schizophrenia Research</u>, 1992, <u>7</u>, 225-232.
- 85. Gur RC, Jaggi JL, Ragland JD, Resnick SM, Shtasel D, Muenz L, Gur RE. Effects of memory processing on regional brain activation: Cerebral blood flow in normal subjects. International Journal of Neuroscience, 1993, 72, 31-44.
- 86. Levick SE, Lorig T, Wexler BE, Gur RE, Gur RC, Schwartz GE. Asymmetrical visual deprivation: A technique to differentially influence lateral hemispheric function. <u>Perceptual and Motor Skills</u>, 1993, <u>76</u>, 1363-1382.
- 87. Crawford HJ, Gur RC, Skolnick B, Gur RE, Benson D. Effects of hypnosis on regional cerebral blood flow during ischemic pain with and without suggested hypnotic analgesia. <u>International Journal of Psychophysiology</u>, 1993, <u>15</u>, 181-195.
- 88. Skolnick BE, Gur RC, Stern MB, Hurtig HI. Reliability of regional cerebral blood flow activation to cognitive tasks in elderly normal subjects. <u>Journal of Cerebral Blood Flow and Metabolism</u>, 1993, <u>13</u>, 448-453.
- 89. Gur RC, Ragland JD, Resnick SM, Skolnick BE, Jaggi J, Muenz L, Gur RE. Lateralized increases in cerebral blood flow during performance of verbal and spatial tasks: Relationship with performance level. Brain and Cognition, 1994, 24, 244-258.
- 90. Saykin AJ, Shtasel DL, Gur RE, Kester DB, Mozley LH, Stafiniak P, Gur RC.

- Neuropsychological deficits in neuroleptic naive, first episode schizophrenic patients. Archives of General Psychiatry, 1994, 51, 124-131.
- 91. Schneider F, Gur RC, Gur RE, Muenz L. Standardized Mood Induction with Happy and Sad Facial Expressions. <u>Psychiatry Research</u>, 1994, <u>51</u>, 19-31.
- 92. Gur RE, Mozley PD, Shtasel DL, Cannon TD, Gallacher F, Turetsky B, Grossman R, Gur RC. Clinical subtypes of schizophrenia differ in brain and cerebrospinal fluid volume. American Journal of Psychiatry, 1994, 151, 343-350.
- 93. Gur RC, Skolnick BE, Gur RE. Effects of emotional discrimination tasks on cerebral blood flow: Regional activation and its relation to performance. <u>Brain and Cognition</u>, 1994, <u>25</u>, 271-286.
- 94. Gur RE, Jaggi JL, Shtasel DL, Ragland JD, Gur RC. Cerebral blood flow in schizophrenia: Effects of memory processing on regional activation. <u>Biological Psychiatry</u>, 1994, <u>35</u>, 3-15.
- 95. Mozley PD, Gur RE, Shtasel DL, Resnick SM, Richards J, Kohn M, Grossman R, Herman G, Gur RC. Magnetic resonance imaging in schizophrenia: II. Relationship to clinical measures. <u>Schizophrenia Research</u>, 1994, <u>12</u>, 195-203.
- 96. Cowell PE, Turetsky BT, Gur RC, Grossman RI, Shtasel DL, Gur RE. Sex differences in aging of the human frontal and temporal lobe. <u>The Journal of Neuroscience</u>, 1994, <u>14</u>, 4748-4755.
- 97. Cannon TD, Zorrilla LE, Shtasel DL, Gur RE, Gur RC, Marco EJ, Moberg P, Price RA. Neuropsychological functioning in siblings discordant for schizophrenia and healthy volunteers. <u>Archives of General Psychiatry</u>, 1994, <u>51</u>, 651-661.
- 98. Holdnack JA, Moberg PJ, Arnold SE, Gur RE, Gur RC. MMPI characteristics in adults diagnosed with ADD: A preliminary report. <u>International Journal of Neuroscience</u>, 1994, <u>79</u>, 47-58.
- 99. Schneider F, Gur RC, Jaggi JL, Gur RE. Differential effects of mood on cortical cerebral blood flow: A ¹³³Xenon clearance study. <u>Psychiatry Research</u>, 1994, <u>52</u>, 215-236.
- 100. Resnick SM, Lazar J, Gur RE, Gur RC. The stability of tachistoscopic measures of hemispheric specialization. <u>Neuropsychologia</u>, 1994, <u>32</u>, 1419-1430.
- 101. Gur RC, Mozley LH, Mozley PD, Resnick SM, Karp JS, Alavi A, Arnold SE, Gur RE. Sex differences in regional cerebral glucose metabolism during a resting state. <u>Science</u>, 1995, <u>267</u>, 528-531.
- 102. Kareken DA, Gur RC, Mozley PD, Mozley LH, Saykin AJ, Shtasel DL, Gur RE. Cognitive functioning and neuroanatomic volume measures in schizophrenia. Neuropsychology, 1995, 9, 211-219.
- 103. Ragland JD, Gur RC, Deutsch GK, Gur RE. Reliability and validity of the paired-associate recognition memory test: A test of declarative memory using Wisconsin card sorting

- stimuli. Psychological Assessment, 1995, 7, 25-32.
- 104. Arnold SE, Gur RE, Shapiro RM, Fisher KR, Moberg PJ, Gibney MR, Gur RC, Blackwell P, Trojanowski JQ. Prospective clinicopathologic studies of schizophrenia: accrual and assessment of patients. <u>American Journal of Psychiatry</u>, 1995, <u>152</u>, 731-737.
- 105. Arnold SE, Franz BR, Gur RC, Gur RE, Shapiro RM, Moberg PJ, Trojanowski JQ. Smaller neuron size in schizophrenia in hippocampal subfields that mediate cortical-hippocampal interactions. <u>American Journal of Psychiatry</u>, 1995, <u>152</u>, 738-748.
- 106. Gur RE, Mozley PD, Resnick SM, Mozley LH, Shtasel DL, Gallacher F, Arnold SE, Karp JS, Alavi A, Reivich M, Gur RC. Resting cerebral glucose metabolism and clinical features of schizophrenia. <u>Archives of General Psychiatry</u>, 1995, <u>52</u>, 657-667.
- 107. Kareken DA, Gur RC, Saykin AJ. Reading on the wide range achievement test-revised and parental education as predictors of IQ: Comparison with the Barona formula. <u>Archives of Clinical Neuropsychology</u>, 1995, <u>10</u>, 147-157.
- 108. Holdnack JA, Moberg PJ, Arnold SE, Gur RC, Gur RE. Speed of processing and verbal learning deficits in adults diagnosed with attention deficit disorder. <u>Neuropsychiatry</u>, <u>Neuropsychology and Behavioral Neurology</u>, 1995, <u>8</u>, 282-292.
- 109. Schneider F, Gur RE, Mozley LH, Smith RJ, Mozley PD, Censits DM, Alavi A, Gur RC. Mood effects on limbic blood flow correlate with emotional self-rating. A PET study with oxygen-15 labeled water. <u>Psychiatry Research</u>, 1995, <u>61</u>, 265-283.
- 110. Heimberg C, Gallacher F, Gur RC, Gur RE. Diet and gender moderate clozapine-related weight gain. <u>Human Psychopharmacology</u>, 1995, <u>10</u>, 367-371.
- 111. Saykin AJ, Gur RC, Gur RE, Shtasel DL, Flannery KA, Mozley LH, Malamut BL, Watson B, Mozley PD. Normative neuropsychological test performance: Effects of age, education, gender and ethnicity. <u>Applied Neuropsychology</u>, 1995, <u>2</u>, 79-88.
- 112. Saykin AJ, Stafiniak P, Robinson LJ, Flannery KA, Gur RC, O'Connor MJ, Sperling MR. Language before and after temporal lobectomy: Specificity of acute changes and relation to early risk factors. Epilepsia, 1995, 36, 1071-1077.
- 113. Turetsky BT, Cowell PE, Gur RC, Grossman RI, Shtasel DL, Gur RE. Frontal and temporal lobe brain volumes in schizophrenia: Relationship to symptomatology and clinical subtype. <u>Archives of General Psychiatry</u>, 1995, <u>52</u>, 1061-1070.
- 114. Schneider F, Gur RC, Gur RE, Shtasel DL. Emotional processing in schizophrenia: Neurobehavioral probes in relation to psychopathology. <u>Schizophrenia Research</u>, 1995, <u>17</u>, 67-75.
- 115. Schneider F, Gur RE, Alavi A, Seligman MEP, Mozley LH, Smith RJ, Mozley PD, Gur RC. Cerebral blood flow changes in limbic regions induced by unsolvable anagram tasks. <u>American Journal of Psychiatry</u>, 1996, <u>153</u>, 206-212.

116. Cowell PE, Kostianovsky DJ, Gur RC, Turetsky BI, Gur RE. Sex differences in neuroanatomical and clinical correlations in schizophrenia. <u>American Journal of Psychiatry</u>, 1996, 153, 799-805.

- 117. Ragland JD, Censits DM, Gur RC, Glahn DC, Gallacher F, Gur RE. Assessing declarative memory in schizophrenia using wisconsin card sorting test stimuli: the paired associate recognition test. <u>Psychiatry Research</u>, 1996, <u>60</u>, 135-145.
- 118. Wang GJ, Volkow ND, Fowler JS, Logan J, Gur RC, Netusil N, Hitzemann RJ, Pappas NS. Age associated decrements in dopamine D₂ receptors in thalamus and in temporal insula of human subjects. <u>Life Sciences</u>, 1996, <u>59</u>, 31-35.
- 119. Gur RE, Petty RG, Turetsky BI, Gur RC. Schizophrenia throughout life: Sex differences in severity and profile of symptoms. <u>Schizophrenia Research</u>, 1996, <u>21</u> 1-12.
- 120. Mozley LH, Gur RC, Gur RE, Mozley PD, Alavi A. The Relationship between verbal memory performance and the cerebral distribution of FDG in patients with schizophrenia. <u>Biological Psychiatry</u>, 1996, 40, 443-451.
- 121. Kareken DA, Moberg PJ, Gur RC. Proactive inhibition and semantic organization: Relationship to verbal memory in patients with schizophrenia. <u>Journal of the International Neuropsychological Society</u>, 1996, <u>2</u>, 486-493.
- 122. Szymanski S, Gur RC, Gallacher F, Mozley LH, Gur RE. Vulnerability to tardive dyskinesia development in schizophrenia: An FDG-PET study of cerebral metabolism. Neuropsychompharmacology, 1996, 15, 567-575.
- 123. Mozley PD, Kim H-J, Gur RC, Tatsch K, Muenz LR, McElgin WT, Kung M-P, Mu M, Myers AM, Kung HF. [I-123] IPT SPECT imaging of CNS dopamine transporters: Non-linear effects of normal aging on striatal uptake values. <u>Journal of Nucl Medicine</u>, 1996, <u>37</u>, 1965-1970.
- 124. Volkow ND, Ding YS, Fowler JS, Wang GJ, Logan J, Gatley SJ, Hitzemann R, Smith G, Fields SD, Gur RC. Dopamine transporters decrease with age. <u>Journal of Nuclear Medicine</u>, 1996, <u>37</u>, 554-559.
- 125. Ragland JD, Glahn DC, Gur RC, Censits DM, Smith RJ, Mozley PD, Alavi A, Gur RE. PET regional cerebral blood flow change during working and declarative memory: Relationship with task performance. Neuropsychology, 1997, 11, 222-231.
- 126. Mozley PD, Gur RC, Swanson CL, Turetsky BI, Gur RE, Nienow T, Alavi A. [Tc-99m] ECD SPECT demonstrates that dopaminergic drugs affect cerebral blood flow in healthy human volunteers. Journal of Nuclear Medicine, 1997, 38, 48.
- 127. Finkelstein JRJ, Cannon TD, Gur RE, Gur RC, Moberg P. Attentional Dysfunctions in neuroleptic-naive and neuroleptic-withdrawn schizophrenic patients and their siblings. <u>Journal of Abnormal Psychology</u>, 1997, <u>106</u>, 203-212.
- 128. Gur RC, Ragland JD, Mozley LH, Mozley PD, Smith R, Alavi A, Bilker W, Gur RE.

Lateralized changes in regional cerebral blood flow during performance of verbal and facial recognition tasks: Correlations with performance and "Effort". <u>Brain and Cognition</u>, 1997, <u>33</u>, 388-414.

- 129. Mozley PD, Sadek AM, Alavi A, Gur RC, Muenz LR, Bunow BJ, Kim H-J, Stecker M, Jolles P, Newberg A. Effects of aging on the cerebral distribution of [Tc-99m] HMPAO in healthy humans. <u>European Journal of Nuclear Medicine</u>, 1997, 24, 754-761.
- 130. Censits DM, Ragland JD, Gur RC, Gur RE. Neuropsychological evidence supporting a neurodevelopmental model of schizophrenia: A longitudinal study. <u>Schizophrenia Research</u>, 1997, <u>24</u>, 289-298.
- 131. Moberg PJ, Doty RL, Turetsky BI, Arnold SE, Mahr RN, Gur RC, Bilker W, Gur RE Olfactory Identification deficits in schizophrenia correlation with duration of illness. American Journal of Psychiatry, 1997, 154, 1016-1018.
- 132. Coleman AR, Moberg PJ, Ragland JD, Gur RC. Comparison of the Halstead-Reitan and infrared light beam finger tappers. <u>Assessment</u>, 1997, <u>4</u>, 277-286.
- 133. Glahn DC, Gur RC, Ragland JD, Censits DM, Gur RE. Reliability, performance characteristics, construct validity, and an initial clinical application of a visual object learning test (VOLT). Neuropsychology, 1997, 11, 602-612.
- 134. Gur RC, Ragland JD, Gur RE. Cognitive Changes in Schizophrenia: A Critical Look . <u>International Review of Psychiatry</u>, 1997, <u>9</u>, 449-457.
- 135. Schneider F, Grodd W, Weiss U, Klose U, Mayer KR, Nagele T, Gur RC. Functional MRI reveals left amygdala activation during emotion. Psychiatry Research:Neuroimaging Section, 1997, 76, 75-82.
- 136. Kohler C, Gur RC, Swanson CL, Petty R, Gur RE. Depression in schizophrenia: I. Association with neuropsychological deficits. <u>Biological Psychiatry</u>, 1998, <u>43</u>, 165-172.
- 137. Gur RE, Cowell P, Turetsky BI, Gallacher F, Cannon T, Bilker W, Gur RC. A followup MRI study of schizophrenia: Relationship of neuroanatomic changes with clinical and neurobehavioral measures. <u>Archives of General Psychiatry</u>, 1998, <u>55</u>, 145-152..
- 138. Kohler C, Swanson CL, Gur RC, Harper Mozley L, Gur RE. Depression In Schizophrenia: II. MRI and PET Findings. <u>Biological Psychiatry</u>, 1998, <u>43</u>, 173-180.
- 139. Ragland JD, Gur RC, Glahn DC, Censits DM, Smith RJ, Lazarev MG, Alavi A, Gur RE. Frontotemporal cerebral blood flow change during executive and declarative memory tasks in schizophrenia: a positron emission tomography study. Neuropsychology, 1998, 12, 399-413.
- 140. Swanson CL, Gur RC, Bilker W, Petty RG, Gur RE. Premorbid educational attainment in schizophrenia: association with symptoms, functioning, and neurobehavioral measures. <u>Biological Psychiatry</u>, 1998, <u>44</u>, 739-747.

141. Volkow ND, Gur RC, Wang GJ, Fowler JS, Moberg PJ, Ding YS, Hitzemann R, Smith G, Logan J. Association between decline of brain dopamine activity with age and cognitive and motor impairment in healthy individuals. <u>American Journal of Psychiatry</u>, 1998, <u>155</u>, 344-349.

- 142. Erwin RJ, Turetsky B, Moberg P, Gur RC, Gur RE. P50 abnormalities in schizophrenia: relationship to clinical and neuropsychological indices of attention. <u>Schizophrenia Research</u>, 1998, 33, 157-167.
- 143. Gur RE, Maany V, Mozley D, Swanson C, Bilker W, Gur RC. Subcortical MRI Volumes in Neuroleptic-Naive and Treated Patients With Schizophrenia. <u>American Journal of Psychiatry</u>, 1998, <u>155</u>, 1711-1717.
- 144. Moberg PJ, Doty RL, Turetsky BI, Arnold SE, Mahr RN, Gur RC, Bilker W, Gur RE. Deterioration of olfactory identification abilities in patients with schizophrenia. <u>American</u> Journal of Psychiatry, 1998, 155(10), 1463-1464.
- 145. Coleman AR, Norstrand JA, Moberg PJ, Kohler CG, Gur RC, Gur RE. MMPI-2 characteristics of adults diagnosed with Attention Deficit Disorder. <u>International Journal of Neuroscience</u>, 1998, <u>96</u>, 161-175.
- 146. Volkow ND, Wang GJ, Fowler JS, Ding YS, Gur RC, Gatley JS, Logan J, Moberg PJ, Hitzemann, RJ, Smith G, Pappas N. Parallel Loss of Pre and Postsynaptic Dopamine Markers in Normal Aging. <u>Annals of Neurology</u>, 1998, <u>44</u>, 143-147.
- 147. Cecil KM, Lenkinski RE, Gur RE, Gur, RC. Proton magnetic resonance spectroscopy in the frontal and temporal lobes of neuroleptic naive patients with schizophrenia. Neuropsychoparmacology, 1999, 20, 131-140.
- 148. Ragland JD, Gur RE, Klimas BC, McGrady N, Gur RC. Neuropsychological laterality indices of schizophrenia: Interactions with gender. Schizophrenia Bulletin, 1999, 25, 79-89.
- 149. Gur RC, Turetsky BI, Matsui M, Yan M, Bilker W, Hughett P, Gur RE. Sex differences in brain gray and white matter in healthy young adults. <u>Journal of Neuroscience</u>, 1999, <u>19</u>, 4065-4072.
- 150. Moberg PJ, Agrin, RN, Gur RE, Gur RC, Turetsky BI, Doty RI. Olfactory dysfunction in schizophrenia: A qualitative and quantitative review. Neuropsychopharmacology, 1999, 21, 325-340.
- 151. Gur RE, Turetsky BI, Bilker WB, Gur RC. Reduced gray matter volume in schizophrenia. Archives of General Psychiatry, 1999, 56, 905-911.
- 152. Ragland JD, Coleman AR, Gur RC, Glahn DC, Gur RE. Sex differences in behavior relationships between verbal episodic memory and resting regional cerebral blood flow. Neuropsychologia, 2000, 38, 451-461.
- 153. Glahn DC, Cannon TD, Gur RE, Ragland JD, Gur RC. Working memory constrains abstraction in schizophrenia. <u>Biological Psychiatry</u>, 2000, <u>47</u>, 34-42.

154. Habel U, Gur RC, Mandal MK, Salloum JB, Gur RE, Schneider F. Emotional processing in schizophrenia across cultures: standardized measure of discrimination and experience. Schizophrenia Research, 2000, 42, 57-66.

- 155. Mozley PD, Acton PD, Barraclough ED, Plossl K, Gur RC, Alavi A, Mathur A, Saffer J, Kung HF. Effects of age on dopamine transporters in healthy humans. <u>Journal of Nuclear Medicine</u>, 1999, 40, 1812-1817,
- 156. McBride T, Arnold SE, Gur RC. A comparative volumetric analysis of the prefrontal cortex in human and baboon MRI. Brain, Behavior & Evolution, 1999, 54,159-166.
- 157. Volkow ND, Logan J, Fowler JS, Wang GJ, Gur RC, Wong C, Felder C, Gatley SJ, Ding YS, Hitzemann R, Papass N. Association between age-related decline in brain dopamine activity and impairment in frontal and cingulate metabolism. <u>American Journal of Psychiatry</u>, 2000, <u>157</u>, 75-80.
- 158. Matsui M, Gur RC, Turetsky BI, Yan M, Gur RE. The relation between tendency for psychopathology and reduced frontal brain volume in healthy people. <u>Neuropsychiatry</u>, <u>Neuropsychology</u>, and <u>Behavioral Neurology</u>, 2000, <u>13</u>, 155-162.
- 159. Gur RC, Alsop D, Glahn D, Petty R, Swanson CL, Maldjian JA, Turetsky BI, Detre JA, Gee J, Gur RE. An fMRI study of sex differences in regional activation to a verbal and a spatial task. <u>Brain and Language</u>, 2000, <u>74</u>, 157-170.
- 160. Kohler CG, Bilker W, Hagendoorn M, Gur RE, Gur RC. Emotion recognition deficit in schizophrenia: Association with symptomatology and cognition. <u>Biological Psychiatry</u>, 2000, <u>48</u>, 127-136.
- 161. Ragland JD, Gur RC, Lazarev, MG, Smith RJ, Schroeder L, Raz J, Turetsky, BI, Alavi A, Gur RE. Hemispheric activation of anterior and inferior prefrontal cortex during verbal encoding and recognition. NeuroImage, 2000, 11, 624-633.
- 162. Gur RE, Cowell PE, Latshaw A, Turetsky BI, Gorssman RI, Arnold SE, Bilker WB, Gur RC. Reduced dorsal and orbital prefrontal gray matter volumes in schizophrenia. <u>Archives of General Psychiatry</u>, 2000, <u>57</u>, 761-768.
- 163. Gur RE, Turetsky BI, Cowell PE, Finkelman C, Maany V, Grossman RI, Arnold SE, Bilker WB, Gur RC. Temporolimbic volume reductions in schizophrenia. <u>Archives of General Psychiatry</u>, 2000, 57, 769-775.
- 164. Kohler CG, Ances BM, Coleman AR, Ragland JD, Lazarev M, Gur RC. Marchiafava-Bignami disease: literature review and case report. Neuropsychiatry, Neuropsychology, & Behavioral Neurology. 2000, 13, 67-76.
- 165. Matsuzawa J, Matsui M, Konishi T, Noguchi N, Gur RC, Bilker W, Miyawaki T. Agerelated volumetric changes of brain gray and white matter in healthy infants and children. Cerebral Cortex. 2001, 11, 335-342.

166. Kurtz, M.M., Moberg, P.J., Harper Mozley, L., Swanson, C.S., Gur, R. C., & Gur, R.E. Effectiveness of an attention and memory training program on neuropsychological deficits in schizophrenia. <u>Neurorehabilitation and Neural Repair</u>, 2001, <u>15</u>, 23-28.

- 167. Ragland JD, Gur RC, Raz J, Schroeder L, Smith RJ, Alavi A, Gur RE. Effect of schizophrenia on frontotemporal activity during word encoding and recognition: A PET cerebral blood flow study. <u>American Journal of Psychiatry</u>, 2001, <u>158</u>, 1114-1125.
- 168. Kurtz, M.M., Ragland, J.D., Bilker, W.B., Gur, R.C., & Gur R.E. Comparison of two forms of the Continuous Performance Test, with and without working memory demands, in healthy controls and patients with schizophrenia. <u>Schizophrenia Research</u>, 2001, <u>48</u>, 307-316.
- 169. Mozley LH, Gur RC, Mozley PD, & Gur RE. Striatal dopamine transporters and cognitive functioning in healthy men and women. <u>American Journal of Psychiatry</u>, 2001, <u>158</u>,1492-1499
- 170. Silver, H, Shlomo, N, Turner, T, Gur, RC. Perception of happy and sad facial expressions in chronic schizophrenia: Evidence for two evaluative systems. <u>Schizophrenia Research</u>, 2002, 55, 171-177,
- 171. Gur RC, Ragland JD, Moberg PJ, Turner TH, Bilker WB, Kohler C, Siegel SJ, Gur RE. Computerized Neurocognitive Scanning: I. Methodology and validation in healthy people. Neuropsychopharmacology, 2001, 25, 766-776.
- 172. Gur RC, Ragland JD, Moberg PJ, Bilker WB, Kohler C, Siegel SJ, Gur RE. Computerized Neurocognitive Scanning II: The Profile of Schizophrenia. <u>Neuropsychopharmacology</u>, 2001, <u>25</u>, 777-788,
- 173. Hill SK, Ragland JD, Gur RC, Gur RE. Neuropsychological differences among empirically derived clinical subtypes of schizophrenia. <u>Neuropsychology</u>, 2001, <u>15</u>, 492-501.
- 174. Moelter ST, Hill SK, Ragland JD, Lunardelli A, Gur, RC, Gur RE, Moberg PJ. Controlled and automatic processing during animal word list generation in schizophrenia. Neuropsychology, 2001, 15, 502-509.
- 175. Kurtz MM, Moberg PJ, Gur RC, Gur RE. Approaches to cognitive remediation of neuropsychological deficits in schizophrenia: a review and meta-analysis. Neuropsychology Review. 2001, 11, 197-210.
- 176. Gur RC, Gunning-Dixon FM, Turetsky BI, Bilker WB, Gur RE. Brain Region and sex differences in age association with brain volume: A quantitative MRI study of healthy young adults. Am J Geriatric Psychiatry, 2002, 10,72-80.
- 177. Ragland JD, Turetsky BI, Gur RC, Gunning-Dixon F, Turner T, Schroeder L, Chan R, Gur RE. Working memory for complex figures: an fMRI comparison of letter and fractal n-back tasks. Neuropsychology, 2002, 16, 370-379.
- 178. Langleben DD, Schroeder L, Maldjian JA, Gur RC, McDonald S, Ragland JD,

O'Brien CP, Childress AR. Brain activity during simulated deception: An event-related functional magnetic resonance study. <u>NeuroImage</u>, 2002, 15, 727-732.

- 179. Gur RC, Sara R, Hagendoorn M, Maron O, Hughett P, Turner T, Bajcsy R, Gur RE. A method for obtaining 3-dimensional facial expressions and its standardization for use in neurocognitive studies. <u>Journal of Neuroscience Methods</u>, 2002, <u>115</u>, 137-143.
- 180. Gur RC, Schroeder L, Turner T, McGrath C, Chan RM, Turetsky BI, Alsop D, Maldjian J, Gur RE. Brain activation during facial emotion processing. NeuroImage, 2002, 16, 651-662.
- 181.Gur RC, Gunning-Dixon F, Bilker WB, Gur RE. Sex Differences in temporo-limbic and frontal brain volumes of healthy adults. <u>Cerebral Cortex</u>, 2002, <u>12</u>, 998-1003.
- 182.Gur RE, Gur RC. Gender differences in aging: Cognition, emotions and neuroimaging studies. <u>Dialogues in Clinical Neuroscience</u>. 2002, <u>4</u>,197-207.
- 183.Goldstein RZ, Volkow ND, Chang L, Wang GJ, Fowler JS, Depue RA, Gur RC. The orbitofrontal cortex in methamphetamine addiction: Involvement in fear. NeuroReport, 2002, 13, 2253-2257.
- 184.Hill SK, Ragland JD, Gur RC, Gur RE. Neuropsychological profiles delineate distinct profiles of schizophrenia, an interaction between memory and executive function, and uneven distributions of clinical subtypes. <u>Journal of Clinical and Experimental Neuropsychology</u>. 2002, 24, 765-780.
- 185.Turetsky BI, Moberg PJ, Mozley LH, Moelter ST, Agrin R, Gur RC, Gur RE. Memory-delineated subtypes of schizophrenia: Relationship to clinical, neuroanatomical and physiological measures. Neuropsychology, 2002, 16, 481-490.
- 186.Gur RE, McGrath C, Chan RM, Schroeder L, Turner T, Turetsky BI, Kohler C, Alsop D, Maldjian J, Ragland JD, Gur RC. An fMRI study of facial emotion processing in schizophrenia. <u>Am Journal of Psychiatry</u>, 2002, <u>159</u>, 1992-1999.
- 187.Rosen AC, Gur RC. Ethical considerations for neuropsychologists as functional magnetic imagers. <u>Brain and Cognition</u>. 2002, <u>50</u>, 469-481.
- 188.Gunning-Dixon FM, Gur RC, Perkins AC, Schroeder L, Turner T, Turetsky BI, Chan RM, Loughead JW, Alsop DC, Maldjian J, Gur RE. Age-related differences in brain activation during emotional face processing. Neurobiology of Aging. 2003, 24, 285-95.
- 189.Kryspin-Exner I, Gur RC, Hoheisel B, Klein M, Six N. Neurobehavioral Probes: Adaptierung und Erweiterung von Verfahren zur computergestützen neuropsychologischen Diagnostik. Verhaltenstherapie und Verhaltensmedizin, 2003, 24, 27-51.
- 190.Kohler CG, Turner TT, Bilker WB, Brensinger C, Siegel SJ, Kanes, SJ, Gur RE, Gur RC. Facial emotion recognition in schizophrenia: Intensity effects and error pattern. <u>American Journal of Psychiatry</u>, 2003, <u>160</u>, 1768-1774.

191. Silver H, Feldman P, Bilker WB, Gur RC. Working memory deficit as a core neuropsychological dysfunction in schizophrenia. <u>American Journal of Psychiatry</u>, 2003, <u>160</u>, 1809-1816.

- 192.Indersmitten T, Gur RC. Emotion processing in chimeric faces: hemispheric asymmetries in expression and recognition of emotions. <u>The Journal of Neuroscience</u>. 2003, <u>23</u>, 3820-3825.
- 193.Bilker WB, Brensinger C, Kurtz MM, Kohler C, Gur RC, Siegel SJ, Gur RE. Development of an abbreviated schizophrenia quality of life scale using a new method. Neuropsychopharmacology. 2003, 28, 773-777.
- 194. Windischberger C, Barth M, Lamm C, Schroeder L, Bauer H, Gur RC, Moser E. Fuzzy cluster analysis of high-field functional MRI data. <u>Artificial Intelligence in Medicine</u>. 2003, <u>29</u>, 203-223.
- 195. Ragland JD, Moelter ST, McGrath C, Hill SK, Gur RE, Bilker WB, Siegel SJ, Gur RC. Levels-of-processing effect on word recognition in schizophrenia. <u>Biological Psychiatry</u>. 2003, <u>54</u>, 1154-1161.
- 196. Dubb A, Gur RC, Avants B, Gee J. Characterization of sexual dimorphism in the human corpus callosum. Neuroimage. 2003 20:512-519.
- 197.Gur RE, Kohler C, Ragland JD, Siegel SJ, Bilker WB, Loughead J, Phend N, Gur RC. Neurocognitive performance and clinical changes in olanzapine-treated patients with schizophrenia. Neuropsychopharmacology. 2003 28:2029-2036.
- 198. Gelber EI, Kohler CG, Bilker WB, Gur RC, Brensinger C, Siegel SJ, Gur RE. Symptom and demographic profiles in first-episode schizophrenia. Schizophrenia Research. 2004, 67, 185-194.
- 199.Kurtz MM, Ragland JD, Moberg PJ, Gur RC: The Penn Conditional Exclusion Test: A New Measure of Executive-function with Alternate Forms for Repeat Administration. Archives of Clinical Neuropsychology. 2004, 19, 191-201.
- 200.Kohler CG, Turner TH, Gur RE, Gur RC. Recognition of facial emotions in neuropsychiatric disorders. <u>CNS Spectrum</u>. 2004, <u>9</u>, 267-274.
- 201. Elliott MA, Gualtieri EE, Hulvershorn J, Ragland JD, Gur R. The effects of geometric distortion correction on motion realignment in fMRI. <u>Academic Radiology</u>. 2004, <u>11</u>, 1005-1010.
- 202. Kurtz MM, Moberg PJ, Gur RC, Gur RE. Results from randomized, controlled trials of the effects of cognitive remediation on neurocognitive deficits in patients with schizophrenia. <u>Psychol Med.</u> 2004, 34, 569-570.
- 203. Lowery N, Ragland JD, Gur RC, Gur RE, Moberg PJ. Normative data for the symbol cancellation test in young healthy adults. <u>Applied Neuropsychology</u>. 2004, <u>11</u>, 218-221.
- 204. Kohler CG, Turner T, Stolar NM, Bilker WB, Brensinger CM, Gur RE, Gur RC.

- Differences in Facial Expressions of Four Universal Emotions. <u>Psychiatry Research</u>, 2004, 128, 235-244.
- 205.Gur RE, Kohler CG, Turetsky BI, Siegel SJ, Kanes SJ, Bilker WB, Brennan AR, Gur RC. A sexually dimorphic ratio of orbitofrontal to amygdala volume is altered in schizophrenia. <u>Biological Psychiatry</u>, 2004, <u>55</u>, 512-517.
- 206. Keefe RSE, Seidman LJ, Christensen BK, Hamer RM, Sharma T, Sitskoorn MM, Lewine RRJ, Yurgelun-Todd DA, Gur RC, Tohen M, Tollefson GD, Sanger TM, Lieberman JA. Comparative effect of atypical and conventional antipsychotic drugs on neurocognition in first-episode psychosis: A randomized double-blind trial of olanzapine versus haloperidol. <u>American Journal</u> of Psychiatry, 2004, 161, 985-995.
- 207. Ragland JD, Gur RC, Valdez J, Turetsky BI, Elliott M, Kohler CG, Siegel SJ, Kanes SJ, Gur RE. Event-related fMRI of frontotemporal activity during word encoding and recognition in schizophrenia. American Journal of Psychiatry, 2004, 161,1004-1015.
- 208. Irani F, Dankert M, Brensinger C, Bilker WB, Nair SR, Kohler CG, Kanes SJ, Turetsky BI, Moberg PJ, Ragland JD, Gur RC, Gur RE, Siegel SJ. Patient attitudes towards surgically-implantable, long-term delivery of psychiatric medicine, <u>Neuropsychopharmacology</u>. 2004, <u>29</u>, 960-968.
- 209. Sachs G, Steger-Wuchse D, Kryspin-Exner I, Gur RC, Katschnig H. Facial recognition deficits and cognition in schizophrenia. <u>Schizophrenia Research</u>. 2004, <u>68</u>, 27-35.
- 210. Weiser M, Reichenberg A, Rabinowitz J, Knobler HY, Lubin G, Yazvitzky R, Nahon D, Gur RC, Davidson M. Cognitive performance of male adolescents is lower than controls across psychiatric disorders: A population-based study. <u>Acta Psychiatrica Scandinavica</u>. 2004, <u>110</u>, 471-475.
- 211. Bilker WB, Brensinger C, Gur RC. A two factor ANOVA-like test for correlated correlations: CORANOVA. <u>Multivariate Behavioral Research.</u> 2004, <u>39</u>, 565-594.
- 212. Verma R, Davatzikos C, Loughead J, Indersmitten T, Hu R, Kohler CG, Gur RE, Gur RC. Quantification of facial expressions using high dimensional shape transformations. <u>Journal of Neuroscience Methods</u>. 2005, 141, 61-73.
- 213.Goldstein RZ, Alia-Klein N, Leskovjan AC, Fowler JS, Wang G, Gur RC, Hitzemann R, Volkow ND. Anger and depression in cocaine addiction: Association with the orbitofrontal cortex. Psychiatry Research: Neuroimaging. 2005, 138, 13–22.
- 214.Dubb A, Xie Z, Gur RC, Gur RE, Gee J. Characterization of brain plasticity in schizophrenia using template deformation. <u>Acad Radiology</u>, 2005, <u>12</u>, 3-9.
- 215. Nucifora PG, Verma R, Melhem ER, Gur RE, Gur RC. Leftward asymmetry in relative fiber density of the arcuate fasciculus. <u>Neuroreport</u>, 2005, <u>16</u>, 791-794.
- 216. Yushkevich P, Dubb A, Xie Z, Gur RE, Gur RC, Gee J. Regional structural characterization of the brain of schizophrenia patients. <u>Acad Radiol.</u>, 2005, <u>12</u>,1250-1261.

217. Calkins ME, Gur RC, Ragland JD, Gur RE. Face recognition memory deficits and visual object memory performance in patients with schizophrenia and their relatives. <u>Am J Psychiatry</u>. 2005,162,1963-1966.

- 218. Ragland JD, Gur RC, Valdez JN, Loughead J, Elliott M, Kohler CG, Kanes SJ, Siegel SJ, Moelter ST, Gur RE. Levels-of-processing effect on frontotemporal function in schizophrenia during word encoding and recognition. American Journal of Psychiatry. 2005, 162, 1840-1848.
- 219. Kurtz MM, Moberg PJ, Ragland JD, Gur RC, Gur RE. Symptoms versus neurocognitive test performance as predictors of psychosocial status in schizophrenia. <u>Schizophrenia Bulletin</u>. 2005, <u>31</u>,167-174.
- 220. Gur RC. Brain maturation and its relevance to understanding criminal culpability of juveniles. <u>Current Psychiatry Reports</u>. 2005, <u>7</u>, 292-296.
- 221. Moelter ST, Hill SK, Hughett P, Gur RC, Gur RE, Ragland JD. Organization of semantic category exemplars in schizophrenia. <u>Schizophr Res</u>. 2005, <u>15</u>, 209-217.
- 222. Platek SM, Loughead JW, Gur RC, Busch S, Ruparel K, Phend N, Panyavin IS, Langleben DD. Neural substrates for functionally discriminating self-face from personally familiar faces, <u>Human Brain Mapping</u>. 2005 Jul 20; [Epub ahead of print]
- 223. Williams LM, Grieve SM, Whitford TJ, Clark RC, Gur RC, Goldberg E, Flor-Hentry P, Peduto AS, Gordon E. Neural synchrony and grey matter variations in human males and females: An integration of 40hz gamma synchrony and neuroimaging measures. <u>Journal of Integrative Neuroscience</u>, 2005, 4, 77-93.
- 224. Davatzikos C, Shen D, Gur RC, Wu X, Liu D, Fan Y, Hughett P, Turetsky BI, Gur RE. Whole brain morphometric study of schizophrenia reveals a spatially complex set of focal abnormalities. Archives of General Psychiatry, 2005, 62, 1218-1227.
- 225. Langleben DD, Loughead JW, Bilker WB, Ruparel K, Childress AR, Busch S, Gur RC. Telling truth from lie in individual subjects with fast event-related fMRI. <u>Human Brain Mapping</u>, 2005, 26, 262-272.
- 226. Davatzikos C, Ruparel K, Fan Y, Shen DG, Acharyya M, Loughead JW, Gur RC, Langleben DD, Classifying spatial patterns of brain activity using machine learning methods: application to lie detection. NeuroImage. 2005, 15, 663-668.
- 227. Schneider F, Gur RC, Koch K, Backes V, Amunts K, Shah NJ, Bilker W, Gur RE, Habel U. Impairment in the specificity of emotion processing in schizophrenia. <u>American Journal of Psychiatry</u>. 2006, 163, 442-447.
- 228. Siegel SJ, Irani F, Brensinger CM, Kohler CG, Bilker WB, Ragland JD, Kanes SJ, Gur, RC, Gur RE. Prognostic variables at intake and long-term level of function in schizophrenia. American Journal of Psychiatry, 2006, 163, 1-9.
- 229. Ragland JD, McCarthy E, Bilker WB, Brensinger CM, Valdez J, Kohler C, Gur RE, Gur RC.

Levels-of-processing effect on internal source monitoring in schizophrenia. <u>Psychological</u> Medicine. 2006, 36, 641-648.

- 230. Gur RE, Kohler CG, Ragland JD, Siegel SJ, Lesko K, Bilker WB, Gur RC. Flat affect in schizophrenia: Relation to emotion processing and neurocognitive measures. Schizophrenia Bulletin, 2006, 32, 279-287.
- 231. Silver H, Goodman C, Bilker W, Gur RC, Isakov V, Knoll G, Feldman P. Impaired error monitoring contributes to face recognition deficit in schizophrenia patients. <u>Schizophrenia Reseach</u>. 2006, <u>85</u>, 151-161.
- 232. Dickinson D, Ragland JD, Calkins ME, Gold JM, Gur RC. A comparison of cognitive structure in schizophrenia patients and healthy controls using confirmatory factor analysis. <u>Schizophrenia Reseach</u>. 2006, <u>85</u>, 20-29.
- 233. Irani F, Platek SM, Panyavin IS, Calkins ME, Kohler C, Siegel SJ, Schachter M, Gur RE, Gur RC. Self-face recognition and theory of mind in patients with schizophrenia and first-degree relatives. Schizophrenia Reseach. 2006, 88, 151-160.
- 234. Sanders RD, Joo YH, Almasy L, Wood J, Keshavan MS, Pogue-Geile MF, Gur RC, Gur RE, Nimgaonkar VL. Are neurologic examination abnormalities heritable? A preliminary study. <u>Schizophrenia Reseach</u>. 2006, <u>86</u>, 172-180.
- 235. Moberg PJ, Arnold SE, Doty RL, Gur RE, Balderston CC, Roalf DR, Gur RC, Kohler CG, Kanes SJ, Seigel SJ, Turetsky BI. Olfactory functioning in schizophrenia: Relationship to clinical, neuropsychological, and volumetric MRI measures. <u>Journal of Clinical and Experimental Neuropsychology</u>, 2006, 28, 1444-1461.
- 236. Weiss EM, Kohler CG, Brensinger CM, Bilker WB, Loughead J, Delazer M, Nolan KA. Gender differences in facial emotion recognition in persons with chronic schizophrenia. Eur Psychiatry. 2007, 22, 116-122.
- 237. Aliyu MH, Calkins ME, Swanson CL Jr, Lyons PD, Savage RM, May R, Wiener H, McLeod-Bryant S, Nimgaonkar VL, Ragland JD, Gur RE, Gur RC, Bradford LD, Edwards N, Kwentus J, McEvoy JP, Santos AB, McCleod-Bryant S, Tennison C, Go RC, Allen TB; PAARTNERS Study Group. Project among African-Americans to explore risks for schizophrenia (PAARTNERS): recruitment and assessment methods. Schizophr Res. 2006; 87:32-44. Erratum in: Schizophr Res. 2007; 90:369.
- 238. Kohler CG, Barrett FS, Gur RC, Turetsky BI, Moberg PJ. Association between facial emotion recognition and odor identification in schizophrenia. <u>J Neuropsychiatry Clin Neuroscience</u>. 2007, 19, 128-131.
- 239. Gur RE, Turetsky BI, Loughead J, Snyder W, Kohler C, Elliott M, Pratiwadi R, Ragland JD, Bilker WB, Siegel SJ, Kanes SJ, Arnold SE, Gur RC. Visual attention circuitry in schizophrenia investigated with oddball event-related functional magnetic resonance imaging. <u>American Journal of Psychiatry</u>. 2007, 164, 442-449.
- 240. Moser E, Derntl B, Robinson S, Fink B, Gur RC, Grammer K. Amygdala activation at 3T in

- response to human and avatar facial expressions of emotions. <u>Journal of Neuroscience Methods</u>. 2007, 161, 126-133.
- 241. Gur RC, Turetsky BI, Loughead J, Waxman J, Snyder W, Ragland JD, Elliot M, Bilker WB, Arnold SE, Gur RE. Hemodynamic responses in neural circuitries for detection of visual target and novelty: An event-related fMRI study. <u>Human Brain Mapping</u>. 2007, <u>28</u>, 263-274.
- 242. Wolf DH, Gur RC, Valdez JN, Loughead J, Elliott MA, Gur RE, Ragland JD. Alterations of fronto-temporal connectivity during word encoding in schizophrenia. <u>Psychiatry Reseach</u>. 2007, 15, 221-232.
- 243. Gur RE, Calkins M, Gur RC, Horan W, Nuechterlein K, Seidman L, Stone W. The Consortium on the genetics of schizophrenia (COGS): Neurocognitive Endophenotypes. <u>Schizophrenia Bulletin</u>, 2007, <u>33</u>, 49-68.
- 244. Ragland JD, Valdez JN, Loughead J, Gur RC, Gur RE. Functional magnetic resonance imaging of internal source monitoring in schizophrenia: Recognition with and without recollection. Schizophrenia Research. 2006; 87: 160-171.
- 245. Weiss EM, Kohler CG, Nolan KA, Czobor P, Volavka J, Platt MM, Brensinger C, Loughead J, Delazer M, Gur RE, Gur RC. The Relationship between history of violent and criminal behavior and recognition of facial expression of emotions in men with schizophrenia and schizoaffective disorder. Journal of Aggressive Behavior, 2006, 32, 187-194.
- 246. Alvino C, Kohler CG, Barrett F, Gur RE, Gur RC, Verma R. Computerized measurement of facial expression of emotions in schizophrenia. J Neurosci Methods. 2007; <u>163</u>: 350-361.
- 247. Habel U, Windischberger C, Derntl B, Robinson S, Kryspin-Exner I, Gur RC, Moser E. Amygdala activation and facial expressions: Explicit emotion discrimination versus implicit emotion processing. Neuropsychologia. 2007, 45, 2369-2377.
- 248. Gur RE, Nimgaonkar VL, Almasy L, Calkins ME, Ragland JD, Pogue-Guile MF, Kanes SJ, Blangero J, Gur RC. Neurocognitive Endophenotypes in a Multiplex Multigenerational Family Study of Schizophrenia, <u>American Journal of Psychiatry</u>, 2007, <u>164</u>, 813-819.
- 249. Pinkham AE, Gur RE, Gur RC. Affect recognition deficits in schizophrenia: neural substrates and psychopharmacological implications. <u>Expert Rev Neurother</u>. 2007, <u>7</u>, 807-816.
- 250. Turetsky BI, Kohler CG, Indersmitten T, Bhati MT, Charbonnier D, Gur RC. Facial emotion recognition in schizophrenia: When and why does it go awry? <u>Schizophr Res</u>. 2007, <u>94</u>, 253-263.
- 251. Fan Y, Gur RE, Gur RC, Wu X, Shen D, Calkins ME, Davatzikos C. Unaffected Family Members and Schizophrenia Patients Share Brain Structure Patterns: A High-Dimensional Pattern Classification Study. <u>Biol Psychiatry</u>. 2007 Jun 5; [Epub ahead of print]
- 252. Calkins ME, Dobie DJ, Cadenhead KS, Olincy A, Freedman R, Green MF, Greenwood TA, Gur RE, Gur RC, Light GA, Mintz J, Nuechterlein KH, Radant AD, Schork NJ, Seidman LJ, Siever LJ, Silverman JM, Stone WS, Swerdlow NR, Tsuang DW, Tsuang MT, Turetsky BI,

Braff DL. The Consortium on the Genetics of Endophenotypes in Schizophrenia: model recruitment, assessment, and endophenotyping methods for a multisite collaboration. <u>Schizophr</u> Bull. 2007; 33: 33-48.

- 253. Halpern DF, Benbow CP, Geary DC, Gur RC, Hyde JS, and Gernsbacher MA. The science of sex differences in science and mathematics. <u>Psychological Science in the Public Interest</u>, 2007; 8: 1-51.
- 254. Kohler CG, Martin EA, Kujawski E, Bilker W, Gur RE, Gur RC. No effect of donepezil on neurocognition and social cognition in young persons with stable schizophrenia. Cognit Neuropsychiatry. 2007; 12: 412-421.
- 255. Wang J, Korczykowski M, Rao H, Fan Y, Pluta J, Gur RC, McEwen BS, Detre JA. Gender Difference in Neural Response to Psychological Stress. <u>Soc Cogn Affect Neurosci</u>. 2007, <u>24</u>, 227-239.
- 256. Gur RE, Loughead J, Kohler CG, Elliott MA, Lesko K, Ruparel K, Wolf DH, Bilker WB, Gur RC. Limbic activation associated with misidentification of fearful faces and flat affect in schizophrenia. Arch Gen Psychiatry. 2007, 64, 1356-1366.
- 257. Silver H, Goodman C, Bilker WB, Knoll G, Gur RC, Povar G. Suboptimal processing strategy and working-memory impairments predict abstraction deficit in schizophrenia. <u>J Clin Exp Neuropsychol</u>. 2007, <u>29</u>, 823-830.
- 258. Greenwood TA, Braff DL, Light GA, Cadenhead KS, Calkins ME, Dobie DJ, Freedman R, Green MF, Gur RE, Gur RC, Mintz J, Nuechterlein KH, Olincy A, Radant AD, Seidman LJ, Siever LJ, Silverman JM, Stone WS, Swerdlow NR, Tsuang DW, Tsuang MT, Turetsky BI, Schork NJ. Initial heritability analyses of endophenotypic measures for schizophrenia: the consortium on the genetics of schizophrenia. Arch Gen Psychiatry. 2007, 64, 1242-1250.
- 259. Ragland JD, Moelter ST, Bhati MT, Valdez JN, Kohler CG, Siegel SJ, Gur RC, Gur RE. Effect of retrieval effort and switching demand on fMRI activation during semantic word generation in schizophrenia. <u>Schizophr Res.</u> 2008, <u>99</u>, 312-23.
- 260. Wang P, Barrett F, Martin E, Milonova M, Gur RE, Gur RC, Kohler C, Verma R. Automated video-based facial expression analysis of neuropsychiatric disorders. <u>J Neurosci Methods</u>. 2008, <u>168</u>, 224-238.
- 261. Loughead J, Gur RC, Elliott M, Gur RE. Neural circuitry for accurate identification of facial emotions. <u>Brain Res.</u> 2008, <u>1194</u>, 37-44.
- 262. Hakun JG, Seelig D, Ruparel K, Loughead JW, Busch E, Gur RC, Langleben DD. fMRI investigation of the cognitive structure of the Concealed Information Test. Neurocase. 2008; 14: 59-67.
- 263. Leitman DI, Loughead J, Wolf DH, Ruparel K, Kohler CG, Elliott MA, Bilker WB, Gur RE, Gur RC. Abnormal Superior Temporal Connectivity During Fear Perception in Schizophrenia. Schizophr Bull. 2008, 34: 673-678.

264. Green MF, Penn DL, Bentall R, Carpenter WT, Gaebel W, Gur RC, Kring AM, Park S, Silverstein SM, Heinssen R. Social Cognition in Schizophrenia: An NIMH Workshop on Definitions, Assessment, and Research Opportunities. <u>Schizophr Bull</u>. 2008 Jan 8; [Epub ahead of print]

- 265. Hakun JG, Ruparel K, Seelig D, Busch E, Loughead JW, Gur RC, Langleben DD. Towards clinical trials of lie detection with fMRI. Soc Neurosci. 2008, 12:1-10.
- 266. Ray R, Loughead J, Wang Z, Detre J, Yang E, Gur R, Lerman C. Neuroimaging, genetics and the treatment of nicotine addiction. Behav Brain Res. 2008 Jun 5. [Epub ahead of print]
- 267. Gur RC, Ragland JD, Reivich M, Greenberg JH, Alavi A, Gur RE. Regional Differences in the Coupling between Resting Cerebral Blood Flow and Metabolism may Indicate Action Preparedness as a Default State. <u>Cereb Cortex</u>. 2008 Jun 4. [Epub ahead of print]
- 268. Dickinson D, Ragland JD, Gold JM, Gur RC. General and specific cognitive deficits in schizophrenia: Goliath defeats David? <u>Biological Psychiatry</u>, 2008 May 8. [Epub ahead of print].
- 269. Almasy L, Gur RC, Haack K, Cole SA, Calkins ME, Peralta JM, Hare E, Prasad K, Pogue-Geile MF, Nimgaonkar V, Gur RE. A Genome Screen for Quantitative Trait Loci Influencing Schizophrenia and Neurocognitive Phenotypes. Am J Psychiatry. 2008 Jul 15. [Epub ahead of print]
- 270. Horan WP, Braff DL, Nuechterlein KH, Sugar CA, Cadenhead KS, Calkins ME, Dobie DJ, Freedman R, Greenwood TA, Gur RE, Gur RC, Light GA, Mintz J, Olincy A, Radant AD, Schork NJ, Seidman LJ, Siever LJ, Silverman JM, Stone WS, Swerdlow NR, Tsuang DW, Tsuang MT, Turetsky BI, Green MF. Verbal working memory impairments in individuals with schizophrenia and their first-degree relatives: Findings from the Consortium on the Genetics of Schizophrenia. Schizophr Res. 2008, 103:218-228.
- 271. Pinkham AE, Sasson NJ, Calkins ME, Richard J, Hughett P, Gur RE, Gur RC. The other-race effect in face processing among African American and Caucasian individuals with schizophrenia. Am J Psychiatry. 2008, 165:639-645.
- 272. Kohler CG, Loughead J, Ruparel K, Indersmitten T, Barrett FS, Gur RE, Gur RC. Brain activation during eye gaze discrimination in stable schizophrenia. Schizophr Res. 2008, 99:286-293.
- 273. Carter CS, Barch DM, Gur RC, Gur RE, Pinkham A, Ochsner K. CNTRICS Final Task Selection: Social Cognitive and Affective Neuroscience-Based Measures. Schizophr Bull. 2008 Nov 14. [Epub ahead of print] PMID: 19011231
- 274. Russ JB, Gur RC, Bilker WB. Validation of affective and neutral sentence content for prosodic testing. Behav Res Methods. 2008 Nov;40(4):935-9. PMID: 19001384
- 275. Dyck M, Winbeck M, Leiberg S, Chen Y, Gur RC, Mathiak K. Recognition profile of emotions in natural and virtual faces. PLoS ONE. 2008;3(11):e3628. Epub 2008 Nov 5. PMID: 18985152

276. Talkowski ME, McClain L, Allen T, Bradford LD, Calkins M, Edwards N, Georgieva L, Go R, Gur RE, Gur RC, Kirov G, Chowdari K, Kwentus J, Lyons P, Mansour H, McEvoy J, O'Donovan MC, O'Jile J, Owen MJ, Santos A, Savage R, Toncheva D, Vockley G, Wood J, Devlin B, Nimgaonkar VL. Convergent patterns of association between phenylalanine hydroxylase variants and schizophrenia in four independent samples. Am J Med Genet B Neuropsychiatr Genet. 2008 Oct 20. [Epub ahead of print] PMID: 18937293

- 277. Patterson F, Jepson C, Strasser AA, Loughead J, Perkins KA, Gur RC, Frey JM, Siegel S, Lerman C. Varenicline Improves Mood and Cognition During Smoking Abstinence. Biol Psychiatry. 2008 Oct 6. [Epub ahead of print] PMID: 18842256
- 278. Wild J, Gur RC. Verbal memory and treatment response in post-traumatic stress disorder. Br J Psychiatry. 2008 Sep;193(3):254-5. PMID: 18757989
- 279. Mathersul D, Palmer DM, Gur RC, Gur RE, Cooper N, Gordon E, Williams LM. Explicit identification and implicit recognition of facial emotions: II. Core domains and relationships with general cognition. J Clin Exp Neuropsychol. 2008 Aug 19:1-14. [Epub ahead of print] PMID: 18720178
- 280. Williams LM, Mathersul D, Palmer DM, Gur RC, Gur RE, Gordon E. Explicit identification and implicit recognition of facial emotions: I. Age effects in males and females across 10 decades. J Clin Exp Neuropsychol. 2008 Aug 19:1-21. [Epub ahead of print] PMID: 18720177
- 281. Turetsky BI, Greenwood TA, Olincy A, Radant AD, Braff DL, Cadenhead KS, Dobie DJ, Freedman R, Green MF, Gur RE, Gur RC, Light GA, Mintz J, Nuechterlein KH, Schork NJ, Seidman LJ, Siever LJ, Silverman JM, Stone WS, Swerdlow NR, Tsuang DW, Tsuang MT, Calkins ME. Abnormal auditory n100 amplitude: a heritable endophenotype in first-degree relatives of schizophrenia probands. Biol Psychiatry. 2008 Dec 15;64(12):1051-9. Epub 2008 Aug 13. PMID: 18701089
- 282. Derntl B, Windischberger C, Robinson S, Lamplmayr E, Kryspin-Exner I, Gur RC, Moser E, Habel U. Facial emotion recognition and amygdala activation are associated with menstrual cycle phase. Psychoneuroendocrinology. 2008 Sep;33(8):1031-40. PMID: 18675521

Contributions to peer-reviewed clinical research publications, participation cited but not by authorship:

None.

Research Publications, non-peer reviewed: None.

Abstracts: (Excluding abstracts subsequently published as full-length papers; Past 3 years only)

- 1. Gur RE, Almasy L, Nimgaonkar V, Gur RC, Turetsky BI. Endophenotypic measures in disorders of complex behavior. Society of Biological Psychiatry, Philadelphia, Pennsylvania, 2002.
- 2. Kurtz M, Moberg PJ, Gur RC, Gur RE. Remediation of Wisconsin Card Sorting Test performance in patients with schizophrenia: A Meta-analysis. The International Neuropsychological Society, Toronto, Canada, 2002.

3. Siegel SJ, Winey Pierre J, Liang Y, Irani F, Maxwell C, Salama R, Weightman BD, Kirshner M, Pollock B, Lewis D, Gur RC, Gur RE. Title: Surgically implantable antipsychotic medication: release kinetics in animals and patient attitudes towards long-term delivery devices. American College of Neuropsychopharmacology, San Juan, Puerto Rico, 2002.

- 4. Calkins ME, Gur RC, Ragland JD, Gur RE. Face recognition memory deficits in schizophrenia patients and their relatives: Comparison with visual object memory performance. International Congress on Schizophrenia Research, Colorado Springs, Colorado, 2003.
- 5. Gur RE, Turetsky BI, Ragland JD, Gur RC. Habituation of the hemodynamic response during novelty detection in schizophrenia. International Congress on Schizophrenia Research, Colorado Springs, Colorado, 2003.
- 6. Kurtz M, Moberg PJ, Ragland JD, Gur RC, Gur RE. Symptoms versus neurocognitive test performance as predictors of psychosocial status in schizophrenia: A 1- and 4-year prospective study. International Congress on Schizophrenia Research, Colorado Springs, Colorado, 2003.
- 7. Lowery N, Ragland JD, Indersmitten T, Gur RE, Gur RC. The contribution of controlled aspects of semantic processing to verbal memory encoding and semantic fluency deficits in schizophrenia. International Congress on Schizophrenia Research, Colorado Springs, Colorado, 2003.
- 8. Kurtz M, Ragland JD, Moberg PJ, Gur RC. The Penn Conditional Exclusion Test: A New Measure of Executive Function With Alternative Forms for Repeat Administration. 31st Annual International Neuropsychological Society Conference, Honolulu, Hawaii, 2003.
- 9. Ragland JD, Gur RC, Valdez J, Gur RE. Effect of schizophrenia on frontotemporal activity during word encoding and recognition: An event- related fMRI study. International Congress on Schizophrenia Research, Colorado Springs, Colorado, 2003.
- 10. Calkins ME, Moberg PJ, Gur RC, Gur RE, Turetsky BI. Memory-delineated subtypes of schizophrenia: Performance in biological relatives. Society of Biological Psychiatry Annual Meeting, New York, New York, 2004.
- 11. Gur RC, Verma R, Davatzikos C, Gur RE. Using DTI to test hypotheses on sex differences in brain organization. New York Academy of Sciences Diffusion Tensor Imaging Workshop. New York, New York, August, 2004.
- 12. Gur RE, Almasy L, Nimgaonkar V, Pogue-Geile M, Ragland JD, Blangero J, Gur RC. Pleiotropic genetic effects in multiplex multigenerational families with schizophrenia on endophenotypic measures of memory and emotion processing. Society for Neuroscience, San Diego, California, 2004.
- 13. Gur RC, Verma R, Loughead J, Davatzikos C, Kohler C, Gur RE. Face processing as a tool for probing the neurobiology of affect: Methods and initial results. 43rd Annual Meeting of

the American College of Neuropsychopharmacology, San Juan, Puerto Rico, 2004.

14. Irani F, Dankert M, Brensinger C, Bilker WB, Nair NR, Kohler CG, Kanes SJ, Turetsky BI, Moberg PJ, Ragland JD, Gur RC, Gur RE, Siegel SJ. Patient attitudes towards surgically-implantable, long-term delivery of psychiatric medicine. American Psychiatric Association annual meeting New York, New York, 2004.

- 15. Moelter ST, Ragland JD, Friedman K, Moberg PJ, Gur RC, Gur RE, Turetsky BI. Does animal fluency reveal cognitive and neuroanatomical heterogeneity in schizophrenia? 33rd annual meeting of the International Neuropsychological Society, St.Louis, Missouri, 2004.
- 16. Ragland JD, Valdez J, Gur RC, Elliott M, Gur RE. Effect of schizophrenia on fMRI activity during shallow and deep word encoding. Human Brain Mapping, Budapest, Hungary, 2004.
- 17. Ragland JD, Valdez J, Loughead J, Gur RC, Elliot M, Gur RE. Diffuse cortical and sub-cortical over-activation during source monitoring in schizophrenia. 43rd Annual Meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico, 2004.
- 18. Ragland JD, McCarthy E, Valdez J, Brensinger C, Bilker WB, Gur RC, Gur RE. Levels-of-processing effect on source monitoring in schizophrenia. 43rd Annual Meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico, 2004.
- 19. Moelter ST, Kohler C, Ragland JD, Gur RC. Progression of Neuropsychological Deficits in a Case of Marchiafava-Bignami Disease. International Neuropsychological Society, Baltimore, Maryland, 2004.
- 20. Stewart CA, Cerhan J, Ragland JD, Gur RC, Smith G. Correlates Between Traditional and Computerized Neuropsychological Testing in Hepatic Encephalopathy. The Liver Meeting, Boston, Massachusetts, 2004.
- 21. Gur RC, Davatzikos C, Shen D, Xiaoyng W, Fan Y, Hughett P, Turetsky BI, Gur RE. Whole-brain deformation based morphometry MRI study of schizophrenia. International Congress on Schizophrenia Research, Savannah, Georgia, 2005.
- 22. Gur RE, Calkins ME, Ragland JD, Richard J, Gur RC. Neurocognitive measures in genetic studies of schizophrenia. International Congress on Schizophrenia Research, Savannah, Georgia, 2005.
- 23. Gur RE, Laura Almasy L, Kohler C, Gur RC. Emotion processing as an endophenotypic measure in family studies of schizophrenia. World Congress of Biological Psychiatry, Vienna, Austria, 2005.
- 24. Ragland JD, Moelter ST, Valdez J, Gur RC, Gur RE. Controlled versus automatic semantic retrieval in schizophrenia: A compressed image acquisition overt word production fMRI study. International Congress on Schizopohrenia Research, Savannah, Georgia, 2005.

1. Gur RE, Gur RC. Correlates of conjugate lateral eye movement behavior in humans. In S. Harnad et al (eds.), <u>Lateralization in the nervous system</u>. New York: Academic Press, 1976.

- 2. Gur RE, Levy J, Gur RC. Clinical studies of brain organization and behavior. In A. Frazer, A. Winokur (eds.), <u>Biological basis of psychiatric disorders</u>. New York: Spectrum, 1977.
- 3. Sackeim HA, Gur RC. Self-confrontations, self-deception and consciousness. In G.E. Schwartz, D. Shapiro (eds.), <u>Consciousness and self-regulation: advances in research</u>. New York: Plenum Press, 1978.
- 4. Gur RC. Imagery, absorption and the tendency toward "mind exploration" as correlates of hypnotic susceptibility in males and females. In F.H. Frankel, H.S. Zamansky (eds.), <u>Hypnosis at its bicentennial: selected papers</u>. New York: Plenum, 1978.
- 5. Gur RC, Gur RE. Handedness and individual differences in hemispheric activation. In J. Herron (ed.), <u>The Neuropsychology of left-handedness</u>. New York: Academic Press, 1979.
- 6. Levy J, Gur RC. Individual differences in psychoneurologicalorganization. In J. Herron (ed.), <u>The neuropsychology of left-handedness</u>. New York: Academic Press, 1979.
- 7. Sackeim HA, Gur RC. Facial symmetry, perceiver biases and the communication of emotion. In J.T. Cacioppo, R.E. Petty (eds.), Social Psychophysiology. New York: Guilford, 1983.
- 8. Gur RC. Measurement and imaging of regional brain function: Implications for neuropsychiatry. In P. Flor-Henry, J. Gruzelier (eds.), <u>Laterality and psychopathology</u>. Amsterdam: Elsevier, 1983.
- 9. Reivich M, Gur RC. Sensory and psychological effects on local glucose metabolism in humans. In M. Reivich (ed.), <u>Positron emission tomography</u>. New York: Liss, 1985.
- 10. Gur RC, Gur RE, Sussman NM, Selzer M. Positron emission tomography in epilepsy. In M. Reivich (ed.), Positron emission tomography. New York: Liss, 1985.
- 11. Gur RC. Measurement of regional brain physiology in humans: early applications in behavioral neurology. In M-M. Mesulam (ed.), <u>Principles of behavioral neurology</u>. Philadelphia: F.A. Davis, 1985.
- 12. Alavi A, Chawluk JB, Hurtig HI, Dann RW, Saykin AJ, Gur RC, Reivich M. Determination of regional cerebral function and structure in normal aging and dementia with positron emission tomography (PET), magnetic resonance imaging (MRI) and x-ray computed tomography (XCT). In H. Hafner, G. Moschel, N. Sartorius (eds.), Mental health in the elderly. Heidelberg: Springer-Verlag, 1985.
- 13. Gur RC, Gur RE. Hemispheric specialization and regional cerebral blood flow. In A. Glass (ed.), <u>Individual differences in hemispheric specialization</u>. New York: Plenum Publications, 1987.
- 14. Gur RC. Imaging the activity of the human brain. National Forum, 1987, 67, 13-16.

15. Gur RC. Integration of multifaceted data on regional brain function: from metabolic images to behavioral images. In R. Takahashi, P. Flor-Henry, J. Gruzelier, S. Niwa (eds.), <u>Cerebral dynamics</u>, <u>laterality and psychopathology</u>. Amsterdam: Elsevier, 1987.

- 16. Gur RC. Atlas of brain imaging: The 133-Xenon inhalation technique. <u>Masters in Psychiatry</u>, 1987.
- 17. Gur RC, Gur RE, Saykin AJ. The neuropsychological study of schizophrenia. In C.A. Tamminga, S.C. Schulz (eds.), <u>Advances in Neuropsychiatry and Psychopharmacology</u>, Vol 1. <u>Schizophrenia Research</u>. New York: Raven Press, 1991, pp.153-162.
- 18. Gur RC, Gur RE. The use of neuroimaging techniques in brain injury. In J. Dywan, R. Kaplan (eds.), Neuropsychology and the Law. New York:Springer-Verlag, 1991.
- 19. Gur RC, Gur RE. The impact of neuroimaging on human neuropsychology. In R.G. Lister, H.J. Weingartner (eds.), <u>Perspectives on Cognitive Neuroscience</u>. Oxford University Press, 1991, 23, 417-435.
- 20. Gur RC, Gur RE. Laterality in schizophrenia: PET studies. In N.D. Volkow (ed), <u>Positron Emission Tomography in Schizophrenia</u>, 1991, <u>3</u>, 47-58.
- 21. Gur RC, Saykin AJ, Gur RE. Neuropsychological assessment in psychiatric research and practice. In S.B. Guze, J. Helzer (eds), <u>Psychiatry</u>, 1991, <u>72</u>, 1-16.
- 22. Gur RC, Gur RE. Neurobehavioral and neuroimaging data in the medical-legal context. In H.V. Hall, R.J. Sbordone (eds.), <u>Disorders of Executive Functions: Civil and Criminal Law Applications</u>, 1993, 4, 107-122.
- 23. Gur RC. Neuropsychological methods for evaluating regional brain dysfunction. In A. Wilner (ed.), <u>Cerebral Damage Before and After Cardiac Surgery</u>. England: Kluwer, 1993, 8, 101-111.
- 24. Gur RC, Gur RE, Saykin AJ. Behavioral Imaging: The Neuropsychological Assessment. In K. Maurer (ed.), <u>Imaging of the Brain in Psychiatry and Related Fields</u>. New York: Springer-Verlag, 1993, 351-361.
- 25. Gur RC, Saykin AJ, Gur RE. Brain function in schizophrenia: application of neurobehavioral studies. In N.C. Andreasen (ed.), <u>Schizophrenia</u>: <u>From Mind to Molecule</u>, 1994, 5, 93-104.
- 26. Gur RC, Gur RE. Methods for the study of brain-behavior relationships. In A. Frazer, P.B. Molinoff, A. Winokur (eds.), <u>Biological Bases Of Brain Function and Disease</u>. Raven Press. 1994, <u>15</u>, 261-279.
- 27. Gur RC, Gur RE. The potential of physiological neuroimaging for the study of schizotypy: experiences from applications to schizophrenia. In A. Raine, T. Lencz, S.A. Mednick (eds.), Schizotypal Personality. Cambridge University Press, 1995, 17, 406-425.

30. Gur RC, Gutierrez JM, Holdnack JA, Mahr RN. Neurobehavioral probes as applied in physiologic neuroimaging studies: Methodologic considerations. In E.D. Bigler (ed.), <u>Handbook of Human Brain Function: Neuroimaging</u>. New York: Plenum Press, 1996, <u>10</u>, 199-214.

- 31. Gur RC, Moberg PJ, Gur RE. Aging and cognitive functioning. In R. Lavizzo-Mourey, M. Forciea (eds.), *Geriatric Secrets*, 1996, 26, 126-129. 3rd Edition in press.
- 32. Gur RE, Gur RC. Blood flow and metabolism in schizophrenia. In R. Mathew (ed.), <u>Cerebral Blood Flow in Neuropsychiatric Disorders</u>. Great Neck, NY: PMA Publishing Corp., in press.
- 33. Gur RE, Gur RC. Schizophrenia: Brain Structure and Function. In H.I. Kaplan, B.J. Sadock (eds.), <u>Comprehensive Textbook of Psychiatry/VII</u>, Philadelphia: Lippincott Williams & Wilkins, 2000.
- 34. Gur RC, Cowell P, Gur RE. Gender Differences in Neuropsychological Testing. To appear in L.J. Dickstein, B.L. Kennedy (eds.), <u>Gender Differences in the Brain: Linking Biology to Psychiatry</u>. New York:Guilford Publications, Inc.
- 35. Gur, R.C., Moelter, S.T., Ragland, JD. "Learning and memory in schizophrenia". In, Sharma, T., & Harvey, P. (Eds.), Cognition in Schizophrenia. Oxford University Press: Oxford, G.B., 1999.
- 36. Gur RC, Gur RE. Neuroimaging applications in the elderly. American Journal of Geriatric Psychiatry, 2002, 10, 5-11.
- 37. Gutierrez, JM and Gur, RC. A computerized forced-choice method for detection of malingering. in: CR Reynolds (Editor) Detection of During Head Injury Litigation (Critical Issues in Neuropsychology). New York: Planum 1998.

COMMENTARIES:

- 1. Gur RC. Measuring hypnotic susceptibility: A guest editorial. <u>American Journal of Clinical Hypnosis</u>, 1979, <u>21</u>, No. 2 and 3, (October 1978/January 1979). (Two issues devoted to the psychometrics of hypnotizability, edited by RC Gur).
- 2. Gur RE, Gur RC. A note on Levick and Voneida: Eye movements in schizophrenics vs. normal subjects. <u>Archives of General Psychiatry</u>, 1979, <u>36</u>, 493-494.
- 3. Sackeim HA, Gur RC. Asymmetry in facial expression. <u>Science</u>, 1980, <u>209</u>, 834-836.
- 4. Sackeim HS, Gur RC. Voice recognition and the ontological status of self-deception. <u>Journal of Personality and Social Psychology</u>, 1985, <u>48</u>, 1365-1368.
- 5. Gur RE, Skolnick BE, Gur RC. Gruzelier's "reconsideration" considered. (Response to J. Gruzelier's reconsideration of Gur et al [1983] conclusions). <u>Archives of General</u> Psychiatry, 1985, 42, 633.
- 6. Saykin AJ, Gur RC. A review of Neuropsychological Assessment of Neuropsychiatric

Disorders. In I. Grant, K.M. Adams (eds.), New York, Oxford University Press, 1986.

7. Gur RC. Do we have a research method for studying self reports? A review of A. Giorgi (ed.), Phenomenology and psychological research. <u>Contemporary Psychology: A Journal of Reviews</u>, 1987, <u>32</u>, 547-548.

- 8. Nasrallah HA, Mitchell AJ, Gur RE, Gur RC, Turetsky BI, Cannon TD, Mozley PD. Brain and CSF Volume Differences in Schizophrenic Subtypes. <u>American Journal of Psychiatry</u>, 1995, <u>152</u>, 817-818.
- 9. Gur RC, Gur RE. Hypofrontality in schizophrenia: RIP. The Lancet, 1995, 345, 1383-1384.
- 10. Lenkinsky RE & Gur RC. MRS: A novel tool for studying brain function. <u>Contemporary Psychology: A Journal of Reviews</u>, 1997, <u>42</u>, 351-352.
- 11. Moberg, P.J., Doty, R.L., Turetsky, B.I., Arnold, S.E., Mahr, R.N., Gur, R.C., Bilker, W., & Gur, R.E. . Olfactory identification abilities deteriorate in patients with schizophrenia, even for those with relatively recent onset [letter; reply]. American Journal of Psychiatry, 1998, 155, 1463-1464.
- 12. Gur RC &.McBride, T. Toward a unitary description of neuropsychological functions: a review of Handbook of Clinical and Experimental Neuropsychology Edited by Gianfranco Denes and Luigi Pizzamiglio. <u>Contemporary Psychology</u>, 2000, <u>45</u>, 682-683.

BOOKS:

Gur RE, Andreasen NA, Asarnow R, Gur RC, Jones P, Kendler K, Matcheri K, Lieberman J, McCarley R, Murray R, Rapoport J, Tamminga C, Tsuang M, Walker E, Weinberger D. Commission on Schizophrenia. In D.L. Evans, E. Foa, R.E. Gur, H. Hendrin, C. O'Brien, M. Seligman, B.T. Walsh, (Eds), Treating and Preventing Adolescent Mental Health Disorders: What We Know and What We Don't Know. New York: Oxford University Press, The Annenberg Foundation Trust at Sunnylands, and the Annenberg Public Policy Center of the University of Pennsylvania, 2005.

PATENT:

Gur RC, Gur RE, Trivedi SS. "Behavioral Imaging: Topographic Display of Neuropsychological Data, U.S. Patent No. 4862359.

ATTACHMENT C



OFFICE OF THE SECRETARY OF DEFENSE

OFFICE OF MILITARY COMMISSIONS 1600 DEFENSE PENTAGON WASHINGTON, DC 20301-1600

JAN 1 3 2008

MEMORANDUM FOR CDR Suzanne Lachelier, JAGC, USNR, Defense Counsel LT Richard E.N. Federico, JAGC, USNR, Defense Counsel

SUBJECT: Request for Appointment of Consultant; United States v. Mohammed, et al.

I considered carefully your letter dated 9 January 2009, asking that I appoint Dr. Ruben C. Gur as an expert consultant in the field of neuroimaging in psychiatry for the defense counsel for Mr. Ramzi bin al Shibh. You have failed to demonstrate the necessity for the expert consultant. *See United States v. Bresnahan*, 62 MJ 137 (C.M.A. 2005). Also, I find your request is untimely. For these reasons, I am unable to grant your request.

SUSAN J. CRAWFORD

Convening Authority
for Military Commissions

UNITED STATES OF AMERICA

v.

KHALID SHEIKH MOHAMMED; WALID MUHAMMAD SALIH MUBARAK BIN 'ATTASH; RAMZI BINALSHIBH; ALI ABDUL AZIZ ALI; MUSTAFA AHMED AL HAWSAWI

i.

D-116 Prosecution Response

To the Defense Motion seeking the appointment of Dr. Ruben C. Gurr, M.A., Ph.D.

2 July 2009

- 1. <u>Timeliness</u>: This response is timely filed pursuant to the Military Judge's ruling on P-010 on 11 June 2009.
- **Relief Sought**: The Defense motion should be denied.
- 3. Facts:
 - a. On 19 December 2006 the accused had a

 . See
 Attachment A (RBS MED-000001117).
 - b. The findings of this were reported as follows:
 - . See Attachment B (RBS-MED-00000111). (Emphasis added).
 - ii. Impression: See Attachment B (RBS-MED-00000111) (Emphasis added).
 - iii. Result Code: See Attachment B (RBS-MED-00000111) (Emphasis added).

4. **Argument**:

- a. The accused is not entitled to Dr. Gurr as a government-funded witness. The December 2006 medical records¹ generated from active-duty military doctors, not affiliated with the Prosecution or this case, indicate that the results
- b. While the accused is entitled to investigative or other expert assistance when necessary for an adequate defense, the mere possibility of assistance is not sufficient to prevail on the request. *See United States v Freeman*, 65 M.J. 451, 458 (C.A.A.F. 2007) *quoting United States v. Bresnahan*, 62 M.J. at 143. Instead, the accused has the burden of establishing that a reasonable probability exists that (1) an expert would be of assistance to the defense and (2) that denial of expert assistance would result in a fundamentally unfair trial. *Id. citing United States* v *Gunkle*, 55 M.J. at 31-32; *United States v. Robinson*, 39 M.J. 88, 89 (C.M.A. 1994). To establish the first prong, the accused "must show (1) why the expert assistance is needed; (2) what the expert assistance would accomplish for the accused; and (3) why the defense counsel were unable to gather and present the evidence that the expert assistance would be able to develop." *Id. quoting Bresnahan*, 62 M.J. at 143.
- c. The Defense cannot establish prong 1 or prong 2 under *Freeman*, as there is simply no indication or evidence that the results (which were done by a neutral doctor and not in anticipation of any litigation purpose) were incorrect when the doctors.

 As such, the

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¹ The defense notes in its motion that it has not been provided in discovery the JTF would ordinarily go along with that would ordinarily go along with the Prosecution is aware of. As it has done in the past, the Prosecution will re-inquire of JTF-GTMO for the existence of any other records the Defense claims should exist.

Defense cannot establish that an expert is needed, what the assistance would accomplish for the accused, or why they were unable to develop that evidence themselves.

Furthermore, the Defense has not and cannot show why any the JTF doctors they have been given access to, or Dr. Amador, cannot help them to understand these records. As such, the Defense fails to establish *any* of the three components of the first prong in *Freeman*. Because the Defense cannot show why employment of an expert on this issue is even necessary, it goes without saying that the Defense also cannot show how denial of the expert assistance would result in a fundamentally unfair trial (the second prong in the *Freeman* test). It simply cannot be the case that the Defense is entitled to government-funded expert assistance of their choosing to question and challenge every finding or diagnosis made by active-duty military doctors over the last three years, when those doctors were not treating the accused in anticipation of litigation and were in no way aligned with the Prosecution.

d. While the accused may be entitled to a qualified psychiatrist when his mental capacity is fairly at issue, the entitlement "is one of access to a competent professional and is not the right to select a particular professional." *See United States v. Fontenot*, 26 M.J. 559, 562 (A.C.M.R. 1988); (*Rev'd on other grounds*, 29 M.J. 253 (C.M.A. 1989)); *citing Ake v. Oklahoma*, 470 U.S. 68, 84 L. Ed. 2d 53, 105 S. Ct. 1087 (1985). The Defense has had access to the medical doctors who have treated the accused since September 2006, to include the doctors who ordered who ordered who could help them understand this evidence if necessary. As such, the Defense is not entitled to Dr. Gur, at what would amount to significant government expense.

e. Notwithstanding the Prosecution's position that the Defense has failed to establish the necessity of a government-funded expert, should the Military Judge determine that the Defense is entitled to such assistance, the Prosecution respectfully requests to be provided the opportunity to seek an adequate substitute from within the United States government.

5. <u>Attachments</u>.

- a. Ramzi bin al Shibh(RBS MED-00000117)
- b. Ramzi bin al Shibh (RBS-MED-00000111)

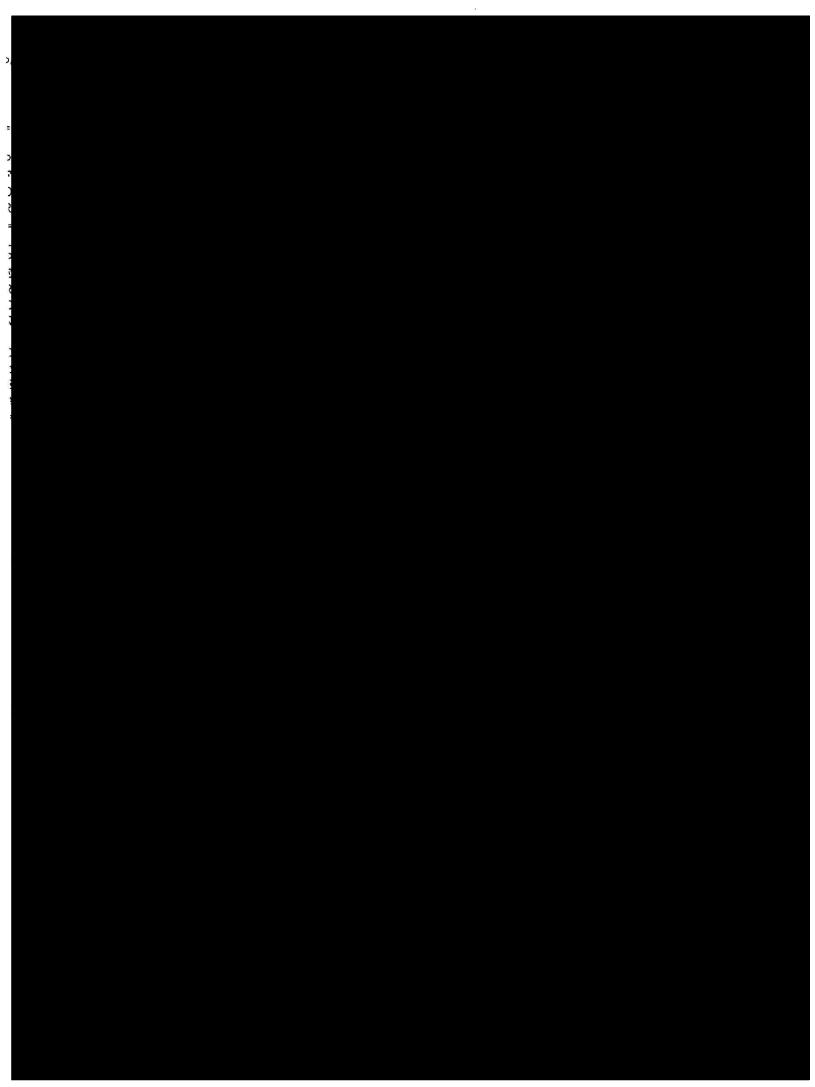
Respectfully Submitted by:

By:

Clayton Trivett, Jr.

Prosecutor

ATTACHMENT A



ATTACHMENT B